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ABSTRACT

Information about the current status of state support for school health programs is provided in this report. A survey of state directors responsible for each school health area in the 50 states and District of Columbia yielded a response rate of 100 percent. Seven chapters cover state organization and coordination, personnel, and programming aspects of (1) school health instruction; (2) school health services; (3) the environment; (4) physical education; (5) food and nutrition services; (6) guidance and counseling; and (7) school psychological services. Twenty-one tables are included. (LMI)

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An Assessment of State Policies To Protect and Improve The Health of Students, Fifth Edition

EA 022 551

SCHOOL HEALTH IN AMERICA

An Assessment of State Policies
To Protect and Improve
The Health of Students,
Fifth Edition

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Fifth Edition
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PREFACE

School Health In America.
Fifth Edition.

School Health in America. The idea and the publication, is more important than ever before. Our Nation is struggling to cope with unprecedented and concurrent epidemics of human immunodeficiency virus, other serious sexually transmitted diseases, unintended pregnancy, drug abuse, and violence. Our youth bear the brunt of these epidemics.

These same youth are sobered by their increasingly poor performance in academic competition with youth of other nations. And many Americans are concerned that as the quality of public education deteriorates, and minority drop-out rates climb, the disparity between rich and poor will widen.

Among actions imperative to improve the education of American students, health and education professionals must collaborate to prevent health problems that cause many youth to drop-out, and many more to fall far short of their potential.

In the United States, policies that ultimately shape school programs, including school health programs, are established by each state. State legislative, executive, and judicial bodies enact policies that determine direction, resources, and standards for local school programs. Local schools retain considerable autonomy to interpret and implement State policies. Nevertheless, State policies have a powerful impact on the education and health of all American youth.

Since its inception in 1927, the American School Health Association (ASHA) has worked to improve school health problems nationwide. The mission of the Association, as described in its Constitution, is stated below.

> The mission of ASHA is to protect and improve the well-being of American children and youth by supporting comprehensive school health programs. These programs significantly affect the health of school personnel who serve them. School health programs prevent, detect, address, and resolve health problems; increase educational achievement; and, enhance the quality of life. The Association works to improve school health education, school health services, and school health environments. The Association also works to support and integrate school counseling, psychological, and social services, food services, physical education programs, and combined efforts of schools, other agencies, and families to improve the health of school-age youth and school personnel.

As one means to assess and improve school health programs nationwide, in 1976 ASHA published the first edition of *School Health in America* to chronicle and compare school health policies established by each State. The second, third, and fourth editions were published in 1979, 1981, and 1986 respectively. Each of the four editions summarized State policies for school health services, education, and environments; and each was widely used by education and health professionals alike.

The fifth edition, which follows, significantly departs from the previous four by summarizing State

policies not only for school health services, education, and environments; but also for food services, physical education, guidance and counseling, and school psychology. Consequently, this edition is a landmark because it describes the broader range of means by which schools directly influence the health of students. This edition thus should be of interest not only to school nurses, health educators, and physicians; but also to school food service workers, physical educators, counselors, and psychologists.

The American School Health Association is planning to reassess State policies in each of these seven categorical areas of total school health programs. Therefore, subsequent editions of *School Health in America* will report on progress begin made to improve school health programs in each State.

President Kennedy once remarked, "We must recognize that every nation determines its policies in terms of its own interests." The policies described in the following pages, for better or worse, collectively reflect the interests of our Nation in fostering the health and education of its youth.

Lloyd J. Kolbe, PhD, FASHA President, American School Health Association and Director, Division of Adolescent & School Health, United States Center for Disease Control Atlanta, Georgia

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INTRODUCTION

Children and youth represent the nation's greatest resource. Their care and nurturance today will provide economic and social dividends. Schools provide a focal point for influencing students' health through health-protecting policy, high-quality instruction, accessible clinical services, and a health-enhancing environment. No other community setting can begin to approximate the influence of education for youth between ages 5 and 18 years. Current estimates indicate 48 million students are enrolled in nearly 15,000 school districts across the country.

For schools to meet the health-related needs of children and youth a comprehensive school health program is required which utilizes a multidisciplinary team of service providers including nurses, psychologists, counselors, and food service personnel, as well as the instructional expertise of educators. The organization of the school system provides a viable framework for meeting the needs of students through programs and policies in 1) health services, 2) health instruction, 3) a healthful school environment, 4) food services, 5) physical education, 6) guidance and counseling, and 7) school psychology. Other areas necessary for a comprehensive program include worksite health promotion programs for school personnel and an integration of health promotion programming between schools and community agencies.

The American School Health Association, the only national professional organization concerned solely with the health of the school-aged child, provides national leadership for strengthening the American system of education by improving the physical, social, and emotional health of students. In its efforts to promote comprehensive school health programs, the American School Health Association (ASHA) recognized the need to periodically describe the status of state support of school health education across the nation. The first edition, published in 1974, contained only 10 questions. The three subsequent surveys expanded the questionnaire.

This edition of *School Health in America* expands upon the information provided in the previous four editions (1974, 1976, 1981, and 1985). First, the assessment of state support for school health programs has been broadened beyond health instruction, services, and environment to include physical education, food services, guidance and counseling and school psychology. Second, the survey results are compared to professional standards in each area where available. This enables the reader to compare compliance by states to the practice suggested by organizations representing the respective professions. Third, state requirements for key elements such as certification and programming are provided in response to the many requests for this information.

The survey instrument was revised based on experiences in conducting the four previous editions, and input from a panel of health and educational professionals from the various disciplines. Where possible, parallel questions were asked in each of the seven areas.

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Surveys were mailed June 1987 to state directors responsible for each school health area. A 100% response rate was obtained. Results reported include information from every state and the District of Columbia. For this report, all data henceforth will be summarized based on 51 states (the 50 states and the District of Columbia).

The accuracy of the information reported by respondents relied upon: 1) familiarity with relevant state statures, 2) understanding and interpretation of items, and 3) willingness and ability to respond. The survey is designed to assess *state* level policies. Thus local level mandates are not reflected in the results. Some local districts may exceed state minimum standards and others may fail to attain the standards.

This study was conducted to provide information about the current status of state support for school health programs. It should provide a better understanding of what programs exist at the state level and what still needs to be accomplished for quality school health programs to be mandated for all students throughout the United States.

SCHOOL HEALTH INSTRUCTION

"Clearly, no knowledge is more crucial than knowledge about health. Without it, no other life goal can be successfully achieved. Therefore, we recommend that all students study health, learning about the human body, how it changes over the life cycle, what nourishes it and diminishes it, and how a healthy body contributes to emotional well being."[1]

Educators, health professionals, and three presidential commissions have supported the need for health education as a necessary and distinct subject within the school curricula.[2] A health education program, one component of a comprehensive school health program, includes:

1. A planned, sequential pre-K to 12 curriculum based on students' needs and current health concepts and societal issues;
2. Instruction intended to motivate health maintenance and promote wellness and not merely to prevent disease or disability;
3. Activities to develop decision-making skills and individual responsibility for one's health;
4. Opportunities for students to develop and demonstrate health-related knowledge, attitudes, and practices; and
5. Integration of the physical, mental, emotional, and social dimensions of health as the basis for study of the ten content areas.[3]

State Organization

Support for health education at the state level includes both educational codes and legislative mandates. In 43 states (84%) a legal basis for health education was established through educational codes or other state legislation; in 36 of these states (71%), health education was mandated by law (Table 1.1). Furthermore, in 40 states (78%) the boards of education had enacted policy statements, regulations, guidelines, and accreditation standards to address health education.

Forty-four states (86%) had a state administrative office charged specifically with directing and supervising health education in public schools.

- 43 states (84%) located the office within the Department of Instruction.
- 2 states (4%) located the office within the Department of Health. (One of these states also reported an office within the Department of Education.)

State Coordination

The quality and effectiveness of a health education programs can be enhanced by providing specific funding, a curriculum guide, a systematic evaluation of current programming, and the coordination of the health education component with other state agencies and organizations.

- 17 states (33%) allocated state funds for health education in addition to the salary for state personnel. State funding for health education ranged between $500 and $2,000,000.
- 40 states (78%) provided a curriculum guide to assist local districts plan health instruction programs. Publication dates of these guides ranged from 1973 to 1987. One-half of the states with a guide reported it was being revised.
- 17 states (33%) reported conducting an evaluation of their health education programs.

Most health education representatives met at least once per year with a representative from the other state-level departments to coordinate programming.

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- 39 states (77%) met with a school health services representative.
- 37 states (73%) met with a physical education representative.
- 35 states (69%) met with a food services representative.
- 31 states (61%) met with a guidance and counseling representative
- 21 states (41%) met with a health environment representative.
- 11 states (22%) met with the school psychology representative.

Several states strengthened programming by incorporating community resources into activities.

- 47 states (92%) cooperated with various voluntary organizations such as the PTA, 4-H Club, March of Dimes, American Cancer Society, American Lung Association, or American Heart Association in providing educational programming.
- 14 states (26%) had a network of health educators who were regional coordinators for their local school health programming.
- 31 states (61%) operated a state information clearing-house that local health educators could use to help plan programs.
- 23 states (45%) had a state level school health advisory council.
- 10 states (20%) provided health education materials in a language other than English. Nine of these provide materials in Spanish.

Personnel

Certification requirements for teachers are established by state certifying agencies. Typically, different standards are established for teachers in elementary and secondary education. In many states specific certification in health education is available, but not mandated by law. It also is often available either as a separate health certificate or in combination with physical education. The separate health-only certification generally requires a greater number of preparation hours specifically related to health than that required for dual certification.

Elementary Health Certification

- 21 states (41%) offered certification for elementary health education teachers. Of the 21 states that offered elementary certification, 10 offered separate certification in health education, 8 offered both separate and dual certification in health and physical education, and 1 offered dual certification in health and physical education. (Two of the 21 states did not respond to this item.) Table 1.1 lists states in which separate certification for elementary health is available. Only one state required teachers to be certified in health education in order to teach the subject in elementary schools.
- 26 states (51%) required elementary teachers to have course work in the subject to qualify for elementary certification.
  - 9 states (18%) required methods and materials.
  - 9 states (18%) required personal health and methods and materials.
  - 7 states (14%) required personal health.
  - 5 states (10%) required health or physical education.
  - 5 states (10%) listed other requirements.

Secondary Health Certification

- 49 states (96%) offered certification for secondary health teachers. Of these 49 states, 24 offered both separate and dual certification in health and physical education, 18 offered separate certification in health education, 5 states offered dual certification in health and physical education and two states did not respond. Table 1.1 lists states in which secondary certification is available.
- 39 states (76.5%) required teachers to be certified in health education to teach the subject in secondary schools. The average number of college credit hours required for certification was 29 hours and ranged from 6 to 50 hours.
- 26 states (51%) required health education teachers to complete additional course work or attend inservice programming to maintain certification.

Even in states that require certification in health education, there often is a way in which certification can be circumvented. For example, the mandated standard can be waived if the teacher is assigned only one section of health to teach. An administrator may assign several physical educators to teach one health course instead of giving a full teaching load of health classes to one certified health educator. In New York the professional organization of health educators recently won a law suit against the New York State Education Department because it allowed 44% of the teachers who were teaching health to do so without certification.[4]

In 1989, the National Task Force on The Preparation and Practice of Health Educators Inc., established a process for credentialing health educators. The credentialing process, spearheaded by health education professionals, identified the role competencies of the entry-level health educator. These include:

1. Assessing individual and community needs for health education,
2. Planning effective health education programs,
3. Implementing health education programs,
4. Evaluating effectiveness of health education programs,
5. Coordinating provision of health education services,
6. Acting as a resource person in health education, and
7. Communicating health and health education needs, concerns, and resources.[5]

It remains unclear how this credentialing process will influence the state certification process. The credentialing process offered through the National Commission for Health Education Credentialing Inc. attests to the individual's attainment of the competencies ascribed by the profession through a national standardized test and could serve as an additional requirement for state certification to teach health education.

Health Education Programs

Curriculum Requirements

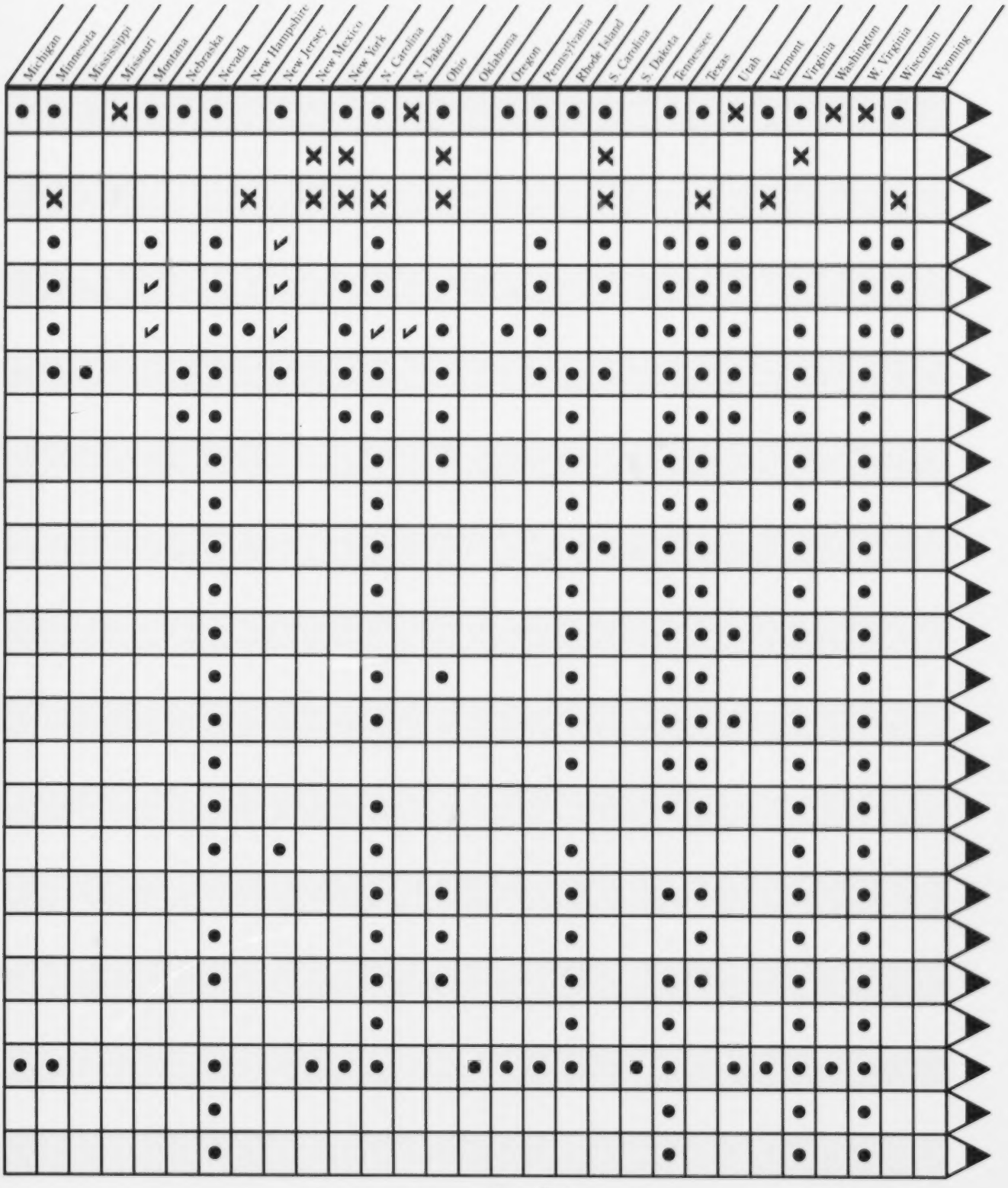
Health researchers have concluded that perhaps as much as 50% of premature morbidity and mortality is related to a health debilitating lifestyle.[6] While the goal of health education is to provide students with the knowledge, skills, and behaviors to choose a health-enhancing lifestyle, many states do not require this course work in health education. Table 1.1 lists the states that required health education at some time during grades one through six, seven through eight, and nine through twelve.

- 32 states (63%) required health education be taught at sometime during K-12; 13 additional states (25%) required a combination of physical education and health education.
- 19 states (37%) required health education be taught sometime during grades 1 through 6; 3 additional states combined the health education requirement with physical education.

Table 1.1 State Requirements Regulating Health Instruction

● = Indicates that the item is mandated or required.
✕ = Indicates that the item is recommended.
✔ = Indicates that the health education requirement is combined with a physical education requirement.

	Alabama	Alaska	Arizona	Arkansas	California	Colorado	Connecticut	Delaware	D.C.	Florida	Georgia	Hawaii	Idaho	Illinois	Indiana	Iowa	Kansas	Kentucky	Louisiana	Maine	Maryland	Massachusetts
Legal Basis for Program	●	✕		●	✕		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Separate Certification Available Elementary					✕		✕									✕		✕				✕
Secondary				✕	✕	✕	✕						✕	✕		✕	✕					
Health Instruction Required Within grades 1-6	●			●				●	●		●	✔		●	✔			●	●			
Within grades 7-8	●			●				●	●		●	●	●	●	✔			●	✔			
Within grades 9-12	●	✔		●				●	●	●	●	●	●	●	✔			●	●	●		
Required Health Topics Drugs & Alcohol	●		●	●		●		●	●		●	●		●	●			●	●	●		
Tobacco Use	●		●	●				●	●		●	●		●						●		
Nutrition	●		●	●				●	●		●	●		●	●				●	●		
Consumer Health	●		●	●				●	●		●	●		●	●				●	●		
Environmental Health	●		●					●	●		●	●		●	●				●	●		
Mental Health	●		●	●				●	●		●	●		●	●				●	●		
Personal Health/Hygiene	●		●	●				●	●		●	●		●	●				●	●		
Safety	●		●					●	●		●	●		●	●				●	●		
Diseases	●		●	●				●	●		●	●		●						●		
Community Health	●		●					●	●		●	●			●				●	●		
Dental/Oral Hygiene	●		●					●	●		●	●		●	●				●			
Family Life/Sex Education	●			●				●	●		●	●			●				●	●		
Venereal Disease	●		●	●				●	●		●	●							●			
CPR	●							●	●		●	●							●	●		
First Aid	●							●	●		●	●							●			
Growth & Development	●		●					●	●		●	●		●	●					●		
AIDS/HIV Education	●						●	●	●	●	●			●	●	●	●	●			●	
Anatomy & Physiology	●		●					●				●		●								
Health Careers			●					●	●		●	●										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S. Dakota
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Utah
Vermont
Virginia
Washington
W. Virginia
Wisconsin
Wyoming

- 22 states (43%) required health education be taught sometime during grades 7 and 8; 4 additional states (8%) combined the health education requirement with physical education.
- 25 states (49%) required a course in health education for high school graduation; 6 additional states (12%) combined the health education requirements with physical education.

Findings from the School Health Education Evaluation study, indicated knowledge, attitudes, and practices reach generally stable levels with approximately 50 classroom hours.[7] For those states that required health education sometime during grades 1-6 the mean number of hours required per year was 53.15. However, the number of hours required decreases as the student progresses through the educational system. In grades 7 and 8 the mean number of hours required was 49.27 per year and 28.60 per year in grades 9-12. Table 1.2 lists the average number of health education hours per year by grade for states that had a specific time requirement.

The National Professional School Health Education Organizations[2] identified 10 essential topics of a comprehensive health instruction curriculum: 1) community health, 2) consumer health, 3) environmental health, 4) family life, 5) growth and development, 6) nutritional health, 7) personal health, 8) prevention and control of disease and disorder, 9) safety and accident prevention, and 10) substance use and abuse. Table 1 depicts those topics plus nine additional topics frequently mandated by various states. The most frequently mandated topics were:

- drugs and alcohol abuse prevention in 29 states (57%)
- tobacco-use prevention in 20 states (39%)
- nutrition in 19 states (37%).

Table 1.2
Average Number of Health Education Hours Required per Year in States with a Specific Time Requirement

States	Grade Range 1-6	7-8	9-12	1-12
Alaska	0	0	9.00 +	3.00 +
Arkansas	60.00	60.00	22.50	47.50
Arizona	30.00	19.00	22.50	25.67
District of Columbia	86.00	54.00	27.00	61.00
Delaware	60.00	30.00	22.50	42.50
Florida	0	0	7.50	2.50
Georgia	30.00	30.00	18.75	26.25
Hawaii	*	45.00	22.50	15.00
Idaho	0	35.00	17.50	11.67
Illinois	*	45.00	22.50	15.00
Indiana	54.00 +	60.00 +	150.00 +	87.00 +
Kentucky	60.00	30.00	22.50	42.50
Louisiana	90.00	180.00 +	15.00	80.00 +
Maine	0	0	17.00	5.67
Minnesota	36.00	20.00	20.00	28.00
Montana	*	72.00 +	36.00 +	24.00 +
North Carolina	*	*	22.50 +	7.50 +
North Dakota	0	0	30.00 +	10.00 +
New Hampshire	0	0	9.00	3.00
New Jersey	90.00 +	90.00 +	90.00 +	90.00 +
Nevada	*	*	22.50	7.50
New York	0	30.00	15.00	10.00
Ohio	0	48.00	22.50	15.50
Oregon	0	0	45.00	15.00
Pennsylvania	*	15.00	7.50	5.00
South Carolina	45.00	37.50	0	28.75
Tennessee	*	90.00	22.50	22.50
Texas	16.00	6.00	40.00	22.33
Utah	*	45.00	22.50	15.00
Virginia	0	72.00	36.00	24.00
Wisconsin	*	15.00	15.00	7.50
West Virginia	34.00	54.00	33.75	37.25
Total	691.000	1182.000	886.000	838.080
Mean@	53.154	49.271	28.597	26.190
S.D.	24.351	35.871	27.141	24.056

0 = No hours
\+ = Hours combined with PE
* = Health Education required but unable to determine hours
@ = Mean is based on the states that reported a requirement

Advisory Councils

Cooperative planning with the community is essential to effective school health programs. Development and involvement of health advisory councils is the mechanism most often recommended for establishing this activity.[8]

- 9 states (18%) required a district to have a school health advisory council that incorporates community representatives.

Programmatic Response to Identified Student Health Problems

In addition to mandated instructional topics, specific programs in 37 states (73%) addressed health problems such as teen pregnancy, suicide prevention, child abuse, AIDS prevention, and substance abuse. Teen pregnancy prevention and AIDS were identified most frequently. With the growing recognition of AIDS as a public health problem, many states initiated legislation to mandate AIDS education in the schools. At the time data were collected, 11 states mandated AIDS education. Instructional materials were available in 38 states (75%), and 37 states (73%) sponsored workshops that addressed implementation of AIDS education. In 44 (86%) states, an individual at the state level coordinated AIDS education in the schools.

Since the time the data were collected, the Centers for Disease Control has recommended and funded AIDS instruction by state and local education agencies. This action together with an increasing awareness of the problem has stimulated further activity. For example, the National Association of State Boards of Education reports that by May 1989, 29 states mandated AIDS education.[9] (Table 1.1). While the number of states mandating instruction has increased in the grade level at which the topic is taught, considerable variation exists.

- 17 states including the District of Columbia (33%) required HIV/AIDS education at the elementary level.
- 7 states (14%) required HIV/AIDS education at the middle grades.
- 1 state (2%) required HIV/AIDS education to begin at the secondary level.
- 4 states (8%) did not specify the grade level at which instruction should begin.

The context in which AIDS/HIV instruction should be delivered also varies among the states that mandated the instruction.

- 12 states (24%) required it be included within the comprehensive health education program.
- 7 states (14%) required the instruction as a part of family life education, sex education, human growth and development or parenting skills.
- 3 states (6%) required it be added to a communicable disease requirement.
- 1 state (2%) required it be added to a sexually transmitted disease requirement.
- 7 states (14%) provided no context for HIV/AIDS instruction.

Summary

A legal basis for health education exists in more than three-fourths of the states. Most states coordinated health education activities with other areas and provided guidelines for local programming. While almost all states required certification in secondary health education only one state required certification in elementary health education. Although almost two-thirds of states required health education to be taught sometime during kindergarten through twelfth grade, the number of hours required, decreased as the student progresses through the secondary level. The most frequently required health education topics were drug, alcohol, and tobacco abuse prevention and nutrition. Finally, a dramatic increase in the number of states requiring AIDS education has occurred in the past two years.

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SCHOOL HEALTH SERVICES

"Education requires undivided attention—possible only when children are free from discomforts caused by physical and emotional conditions that can be prevented, diagnosed, treated, or minimized through the provision of comprehensive primary health services."[1]

The school health services program functions to enhance the educational process by maintaining and improving the physical and mental health of students and staff. The focus is provided through an emphasis on prevention, case finding, early intervention and remediation of health problems, along with an emphasis on health instruction, counseling, and the provision of a safe school environment.[2]

State Organization

Thirty-three states (65%) reported educational codes or legislation that established a legal basis for school health services in public schools. Of these, 28 states (55%) reported school health services were mandated by law (Table 2.1).

In 34 states (67%), a state-level administrative office was specifically charged with supervising school health services. The professional responsible for school health services was employed by:

- the state department of education in 20 states (39%);
- the state department of health in 13 states (26%);
- the state departments of health and education in 5 states (10%); and
- an agency other than the state departments of health and/or education in 13 states (26%).

State Coordination

The quality and effectiveness of a health services program can be enhanced by providing specific funding, a policy and procedure manual, systematic evaluation of current programming, and the coordination of the health services component with other state agencies and organizations.

- 11 states (22%) allocated funds for health services programs other than the salary for state personnel. The average amount reported ranged from $3000 to $18,000,000.
- 40 states (78%) maintained a policy and procedure manual designed to assist local districts in developing a health services program. Policy manual publication dates ranged from 1968 to 1987. Twenty-one states (41%), indicated their manual was being revised.
- 26 states (52%) conducted an evaluation to determine the effectiveness of the health services program.

States coordinated/organized a variety of programs to enhance support for health services.

- 18 states (35%) had a state level school health advisory council. The number of advisory council meetings ranged from one a year to one a month. The average number of meetings was four per year.
- 46 states (90%) noted the state office for health services participated in cooperative programming with voluntary and service organizations such as the PTA, 4H Club, March of Dimes, American Cancer Society and/or American Heart Association.

- 7 states (14%) required the organization of a school health advisory council at the district level which included community representatives.

Most school health services representatives met at least once a year with a representative of other state-level departments to coordinate programming:

- 38 states (75%) met with a health education representative.
- 29 states (57%) met with a food service/child nutrition representative.
- 27 states (53%) met with a physical education representative.
- 26 states (51%) met with a guidance and counseling representative.
- 24 states (47%) met with a school environment representative.
- 20 states (39%) met with a school psychology representative.

Personnel

The health service team may include a school physician, school nurse, school nurse practitioner, dentist, speech and hearing specialist, social worker, and/or health aide. Health care experts suggest that at a minimum, a school nurse should be employed who works under the supervision of the director of public health or a part time school physician.[3]

School Nurse

To meet the need for a unified, nationally accepted standard of practice for school nursing, five professional associations which promote school nursing published *The Standards of School Nursing Practice* in 1983.[4] Eight specific standards were identified for the school nurse:

1) Apply appropriate theory as the basis for decision making in nursing practice;
2) Establish and maintain a comprehensive school health program;
3) Develop individualized health plans;
4) Collaborate with other professionals in assessing, planning, implementing, and evaluating programs and other school health activities;
5) Assist students, families, and groups to achieve optimal levels of wellness through health education;
6) Participate in peer review and other means of evaluation to assure quality of nursing care provided for students and assumed responsibility for continuing education and professional development for self while contributing to the professional growth of others;
7) Participate with other key members of the community responsible for assessing, planning, implementing, and evaluating school health services and community services that include the broad continuum of promotion of primary, secondary, and tertiary prevention; and
8) Contribute to nursing and school health through innovations in theory and practice and participation in research.

Table 2.2 lists the responsibilities of the school nurse as established by mandates or guidelines. Most states did not mandate specific responsibilities for the school nurse.

- 19 states (37%) mandated disease control and prevention of disease.
- 18 states (35%) mandated a nursing plan for children with handicaps or special needs.
- 11 states (22%) mandated the provision of emergency care.
- 11 states (22%) mandated the provision of optimum sanitary conditions

Qualifications for school nurse practice have been established by a task force composed of the five organizations that represent the profession of school nursing. Professional standards include 1) a baccalaureate degree from an accredited institution of higher learning, 2) valid state registered nurse license, 3) current state and/or national school nurse certification, 4) two years nursing experience in child health.[5] State standards varied considerably.

- 32 states (63%) required a valid, registered nurse license.
- 9 states (18%) allowed either a registered nurse or a licensed practical nurse to be employed.
- 18 of 29 states (57%) in which school nurse certification was available required certification to practice (Table 2.1).

Minimum educational requirements to attain certification also varied among states.

- 18 states (35%) required a baccalaureate in nursing for certification.
- 8 states (16%) required a diploma in nursing.
- 2 states (4%) required an associate degree in nursing.
- 2 states (4%) required a degree in nursing combined with a baccalaureate in another field.

Other certification requirements included specific course work , a practicum, and several years of nursing experience.

- 20 states (39%) required specific course work.
- 13 states (25%) required completion of a practicum.
- 10 states (20%) required a minimum number of years of nursing experience.

Sixteen states (31%) required nurses to obtain a minimum number of continuing education units (CEUs) to maintain their license to practice. The number of required CEU hours ranged from 5 to 90 hours annually. Five states (10%) did not report the number of CEU hours required annually.

Table 2.2
School Nurse Responsibilities

Responsibilities	Level of Policy		
	Mandatory Requirements N (%)	Recommended Guidelines N (%)	No Policy N (%)
Help prevent/control disease	19 (37)	26 (51)	6 (12)
Appraise health status of students	18 (35)	26 (51)	7 (14)
Plan for students with special needs	16 (31)	27 (53)	7 (14)
Provide emergency care	11 (22)	31 (61)	8 (16)
Promote optimum sanitary conditions	11 (22)	26 (51)	14 (27)
Counsel students/parents about health findings	8 (16)	34 (67)	8 (16)
Coordinate student care with other agencies	6 (12)	31 (61)	14 (27)
Provide health instruction	4 (8)	30 (59)	16 (31)
Provide primary health care to students	4 (8)	22 (43)	24 (47)
Appraise health status of school employees	2 (4)	22 (43)	27 (53)
Coordinate health promotion programming for school employees	–	27 (53)	23 (45)
Other[2]	8 (16)	4 (8)	–

[1] Items not totaling 100% are due to missing data.

[2] Includes screenings (6), supervision of health aides (1), coordination of services (1), maintenance of immunization records (1), administration of medicines (1), and health promotion for students (1).

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School Nurse Practitioner

Several states have developed specific credentialing requirements for the school nurse practitioner. In other states, the school nurse practitioner uses the generic credentialing requirements for nurse practitioners regardless of specialty.

- 16 states (31%) made school nurse practitioner certification available.

School Physician

While school physicians were the first medical personnel employed in school health services programs, many of their activities have been assumed by school nurses. Most schools do not employ a full-time physician.

- 3 states (6%) provided the opportunity for school physician certification, but only 2 states required certification.
- 17 states (33%) required a MD or DO degree to practice as a school physician, 8 states (16%) required a MD degree specifically.

Table 2.1 State Requirements Regulating Health Services

● = Indicates that the item is mandated or required.
✕ = Indicates that the item is recommended.

	Alabama	Alaska	Arizona	Arkansas	California	Colorado	Connecticut	Delaware	D.C.	Florida	Georgia	Hawaii	Idaho	Illinois	Indiana	Iowa	Kansas	Kentucky	Louisiana	Maine	Maryland	Massachusetts
Legal Basis for Program			●		✕	●	●	●	●	●		●		●	✕			●	●	●	●	●
Certification for School Nurse Available		✕			●	✕		●					●	●	✕	✕	✕	✕	●	●		
Screening Policies Vision		●	✕	●	●	●	●	●	●	●	●	✕		●	●	✕	●	●	●	✕	●	●
Hearing		●	●	●	●	●	●	●	●	●	●	✕		●	●	✕	●	●	●	✕	●	●
Height/Weight			✕	✕		✕	●		●	●		✕		●	✕	✕	✕	●	✕			●
Dental			✕	✕	✕	✕	●		●		●	✕		✕	✕		●	✕	✕		✕	✕
Scoliosis			●	●	●	✕	●	●	●	●	✕	✕		✕	●	✕	✕	●	✕	●	✕	●
Lead				✕					●					✕		✕		✕	✕			
Speech				✕			●		●					●		✕			✕	●		
Tuberculosis		●		✕					●			✕				✕		●				
Sickle Cell Anemia			✕	✕	✕				●					✕		✕	✕					
Blood Pressure			✕	✕			●		●					●								✕
Physical Exam (Other Than Sports)			✕	✕	✕	✕	●	●	●	●				●	✕		✕	●	✕		✕	●
Lean Body Mass				✕							✕											
Physical Fitness				✕	●						✕					✕	✕	✕				
Health Risk Appraisal				✕													✕	●				
HIV POLICIES Students with HIV		✕	✕	✕		✕	✕	✕	✕		✕	✕			✕			✕	✕	✕	✕	✕
Employees with HIV		✕	✕	✕		✕			✕	✕	✕	✕							✕		✕	✕
Disposal of Bodily Fluids			✕	✕	✕	✕	✕	✕	✕	✕	✕	✕		✕	✕		✕	✕	✕	✕	✕	✕

Health Aide

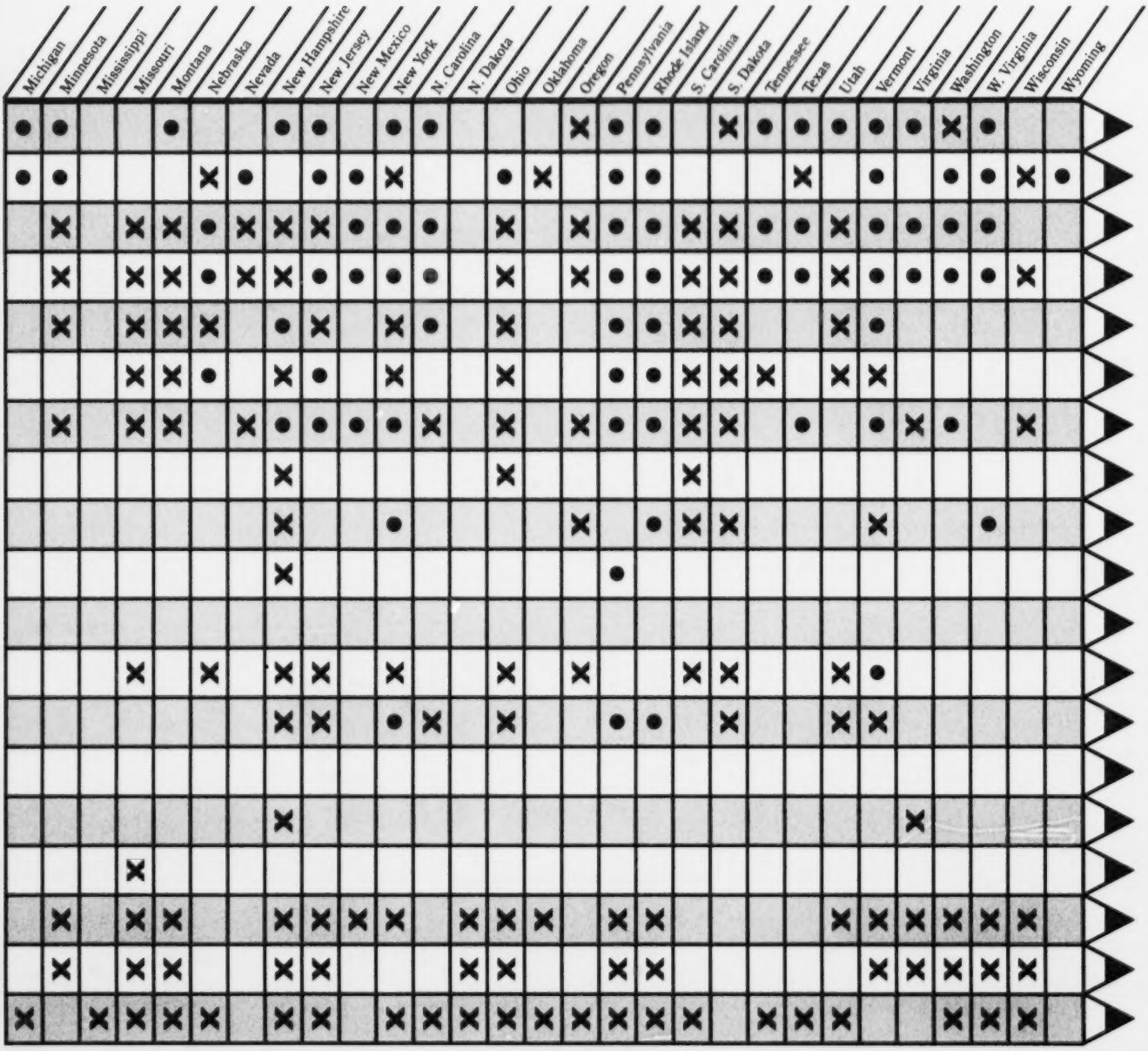
Schools frequently employ health aides to assist the school nurse deliver specific health services and/or record health information.

- 39 states (76%) employed health aides.
- 3 states (6%) made certification available to health aides and also required first aid certification.
- 9 states (18%) regulated the functions of health aides.
- 8 states (16%) required the health aides to work under the supervision of a registered nurse.

Programming

Employment Practices

Three alternative models exist to deliver health services to local schools. The options include 1) the provision of service by the public health department within the limitations of their operating budget, 2) the purchasing of services from the public health department at a level desirable to both operating boards, 3) or the direct employment of school health service personnel by the school board. While all three options have been successful, the third alternative appears to be the option favored by most school programs. This alternative permits the board of education direct control over the services.[3]



- 20 states (39%) authorized school boards to hire health services personnel.
- 16 states (31%) allowed the responsibility for the hiring of health service personnel to be shared by the school board and the health department.
- 12 states (23%) permitted either the school board or health department to employ health services personnel.
- 2 states (4%) authorized the health department to hire the health services personnel.

Required Health Facilities

For the health services program to function and meet its goal of promoting, protecting, maintaining, and improving the health status of children and youth, specific facilities and adequate space are required. For example, the Ohio Association of School Nurses suggests a first aid room be available that is sufficiently quiet for hearing screening, sufficiently large to accommodate distance for vision screening and has toilet and hand washing facilities, locked storage and electrical outlets. The state of Ohio mandates facilities to support the work of certified staff which has work space, filing facilities, access to a telephone, and access to a room for private conferences.[6] Nationally, school health facilities varied considerably.

- 12 states (24%) mandated specific health facilities; 30 states (59%) recommended that facilities be provided.
- 6 states (12%) mandated the provision of supplies; 30 states (59%) recommended supplies be provided.

Nurse to Student Ratio

The standards for school nursing practice[4] suggest the following ratios be used as guidelines to staff health services programs in the school setting: 1:750 in general school populations, 1:225 in mainstreamed populations, and 1:125 in severely/profoundly handicapped populations. Few states have mandated these standards (Table 2.3).

- 8 states (16%) mandated a specific school nurse to student ratio; 11 states (22%) recommended a school nurse to student ratio.
- 6 states (12%) reported ratios of 1:750 for regular students.
- 2 states (4%) reported ratios of 1:225 for mainstreamed students.
- 1 state (2%) reported ratios of 1:125 for severely handicapped.

Student Health Requirements for Entry to Kindergarten

Prerequisite to providing comprehensive care to students is gathering pertinent health information. School nursing practice standards[4] suggest that the school nurse should systematically record the following data on the student's cumulative health record: growth and development history, health history, physical assessment, emotional status, performance level of activities of daily living, nutritional status, immunization status, screening results, and the students' health goals and perception of personal health status. Table 2.4 lists various state requirements for entry to kindergarten.

Immunizations for Entry into Kindergarten

In response to the increasing incidence of vaccine preventable childhood diseases in the 1970s, the National Immunization Initiative was launched in 1977. This initiative included the provision for immunization as a school entry requirement.[7]

- 50 states (98%) mandated DTP, measles and rubella immunizations; 1 state (2%) recommended these immunizations.
- 49 states (96%) mandated polio immunization; 1 state (2%) recommended this practice.
- 38 states (75%) mandated mumps immunization; 11 states (22%) recommended this practice.
- 12 states (23%) mandated a tuberculin test; 2 states (4%) recommended the test.

Other Requirements for Entry into Kindergarten

With vision and hearing disorders representing the fourth and fifth most common problems in children,[8] programs that identify and facilitate early correction of the problem are appropriate.

- 33 states (65%) mandated a hearing examination prior to school entry; 12 states (23%) recommended a hearing screening.
- 32 states (63%) mandated vision screening; 13 states (25%) recommended vision screening.

Table 2.3
State Policies for School Nurse to Student Ratio

States	Ratio
Arizona	1 to 750 regular students 1 to 225 mainstreamed students 2 to 100 severly handicapped students
Arkansas	1 to 750 regular students
Colorado	1 to 1,300 regular students 1 to 400 mainstreamed and severly handicapped students
*Delaware	1 to 750 regular students
*Hawaii	1 per district
*Louisiana	1 to 3,000 regular students
*Minnesota	1 per district (for 1,000 students or more)
Mississippi	1 to 750 regular students
Montana	1 to 750 regular students
New Hampshire	1/2 to 500 K-6 enrollment
*New Jersey	1 per district
Ohio	1 to 750 regular students 1 to 225 mainstreamed students 1 to 125 severly handicapped students
*Pennsylvania	1 to 1,500 all students
South Carolina	1 per school or 1 to 1,200 (all students)
Tennessee	1 to 1,200 regular students
Texas	1 to 1,000 all students
Vermont	1 to 750
*West Virginia	1 to 1,500 K-7 enrollment

*Ratio is mandated

Table 2.4
Number of States with Screening Requirements for Entry to Kindergarten

Requirements	Level of Policy Mandated by Law N (%)	 Recommended N (%)	 No Policy N (%)
Screenings			
Hearing	33 (65)	12 (23)	6 (12)
Vision	32 (63)	13 (25)	6 (12)
Physical	18 (35)	21 (41)	12 (24)
Speech	13 (26)	19 (37)	19 (37)
Height & Weight	12 (23)	20 (39)	19 (37)
Dental	8 (16)	21 (41)	22 (43)
TB Test	12 (23)	2 (4)	26 (51)
Scoliosis	8 (16)	11 (22)	30 (59)
Immunizations			
DTP	50 (98)	1 (2)	–
Measles	50 (98)	1 (2)	–
Rubella	50 (98)	1 (2)	–
Polio	49 (96)	1 (2)	–
Mumps	38 (75)	11 (21)	2 (4)

[1] Items not totaling 100% are due to missing data.

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Several states required pre-kindergarten screening. This often was completed in conjunction with pupil registration. In Ohio, the health assessment form solicits information on family history, birth and prenatal health history, medical history, motor development, school readiness, and the results of vision, hearing, and speech screening.[6]

- 18 states (35%) required a physical examination; 21 states (41%) recommended a physical.
- 13 states (26%) required a speech test; 19 states (37%) recommended this test.

Periodic Screening Examinations for Students

Updating students' health status necessitates periodic screenings. It is estimated that between 12% and 20% of all children suffer from a hearing disorder, while 30% of all children have some degree of visual impairment.[8] Of the three major visual disorders in children which can be identified via screening, refractive errors are found in 15%; strabismus in 5%; and amblyopia in 2-3% of the children[9]. Scoliosis, or abnormal curvature of the spine, if untreated, can cause unsightly deformities and disorders with the internal organs. It is estimated that while one in ten students may have scoliosis, only two to three in one hundred will have a progressive condition requiring treatment, therefore, some have questioned the cost effectiveness of routine periodic scoliosis screening.[10]

Many states have instituted mandates requiring early and periodic health screenings, to assure that disorders which have the potential to impact negatively on learning are discovered early. Table 2.4 shows the number of states with screening requirements for entry to kindergarten. Table 2.1 lists the screenings required by the specific states at least once during the K-12 experience. Table 2.5 summarizes the number of states that required screenings during kindergarten through twelfth grade.

- 30 states (59%) mandated screenings for hearing disorders at least once during a students K-12 learning experience; 14 (27%) recommended screenings.
- 28 states (55%) mandated vision screening; 15 (29%) recommended this practice.
- 20 states (39%) mandated scoliosis screening; 19 states (37%) recommended this practice.
- 11 states (22%) mandated monitoring of height and weight; 18 (35%) recommended this practice.
- 10 states (20%) mandated a physical examination other than a sports physical; 15 states (29%) recommended this examination.
- Less than 10 states mandated screenings for dental disease, speech disorder, high blood pressure, tuberculosis, lead poisoning, sickle cell anemia, physical fitness, or completed a health risk appraisal.

Development of Individualized Health Plans

School nurses develop individualized health plans with specific goals and interventions delineating school nurse actions unique to student needs. Nursing care plans for students with a problem not only must be recorded, but communicated to appropriate school personnel[4].

- 12 states (24%) mandated that teachers be informed of any health disorder or disability which may impact on the students' ability to learn, 22 states (43%) recommended this disclosure.

Prescribing Medications

Increasingly, school personnel are being asked to administer medication in the school setting. It has been estimated that 1-2% of students in regular education classes and 8% of children in preschool special education classes receive medication for hyperactivity. To safeguard students and the school personnel who are entrusted with their health-related needs, policy regulating the use of prescription medication within the schools is needed.[11]

- 28 states (55%) had a policy that outlined the administration of prescription drugs at school; 13 states (25%) provided guidelines for prescription drugs.
- 17 states (33%) had a policy that outlined the administration of nonprescription drugs at school; 16 states (31%) provided guidelines for nonprescription drugs.

Complex Nursing Care

Depending upon how disability is defined, 5-20% of all children have special needs. With the passage of PL-94-142, The Education for All Handicapped Children Act of 1975, handicapped children have had access to free and appropriate public education consisting of special education and related services. Many of these children have complex medical needs that fall under the heading of "related services." Because no federal statutes govern health services in the schools, wide variation exists between states and within school districts in regard to services delivered.[12]

Table 2.5
Number of States with Policies for Specific Screening Requirements

Activity	K N (%)	1 N (%)	2 N (%)	3 N (%)	4 N (%)	5 N (%)	6 N (%)	7 N (%)	8 N (%)	9 N (%)	10 N (%)	11 N (%)	12 N (%)
Vision	24 (47)	20 (39)	11 (22)	21 (41)	8 (16)	19 (37)	8 (16)	15 (29)	9 (18)	15 (29)	8 (16)	9 (18)	6 (12)
Hearing	25 (49)	23 (45)	13 (25)	19 (37)	7 (14)	15 (29)	6 (12)	14 (27)	7 (14)	9 (18)	9 (18)	5 (10)	4 (8)
Scoliosis	–	–	–	1 (2)	2 (4)	12 (23)	15 (29)	18 (35)	14 (27)	10 (20)	5 (10)	3 (6)	1 (2)
Height/Weight	10 (20)	8 (16)	7 (14)	8 (16)	6 (12)	8 (16)	7 (14)	8 (16)	6 (12)	8 (16)	7 (14)	7 (14)	6 (12)
Physical Exams	9 (18)	3 (6)	–	2 (4)	1 (2)	2 (4)	2 (4)	4 (8)	–	2 (4)	3 (6)	2 (4)	–
Dental	6 (12)	6 (12)	3 (6)	6 (12)	4 (8)	4 (8)	4 (8)	4 (8)	3 (6)	3 (6)	3 (6)	4 (8)	2 (4)
Speech	6 (12)	1 (2)	–	3 (6)	3 (6)	2 (4)	1 (2)	–	–	–	1 (2)	–	–
Blood Pressure	3 (6)	1 (2)	–	1 (2)	–	3 (6)	1 (2)	1 (2)	–	3 (6)	1 (2)	2 (4)	–
TB Test	4 (8)	1 (2)	–	1 (2)	–	–	1 (2)	–	–	1 (2)	1 (2)	–	–
Lead Poisoning	1 (2)	1 (2)	–	–	–	–	–	–	–	–	–	–	–
Sickle Cell Anemia	1 (2)	–	–	–	–	–	–	–	–	–	–	–	–
Fitness	–	–	–	–	–	1 (2)	–	1 (2)	–	–	1 (2)	–	–
Health Hazard Appraisal	1 (2)	1 (2)	1 (2)	1 (2)	1 (2)	1 (2)	1 (2)	1 (2)	1 (2)	1 (2)	1 (2)	1 (2)	1 (2)

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The standards of school nursing practice specifically state that the nurse should "...provide appropriate and necessary nursing care to insure optimal educational opportunity for the handicapped." Further, PL 94-142, The Education for All Handicapped Children Act of 1975, specifically identifies the need for the participation of the school nurse.[12] However, most states did not require the school nurse to assist in developing individualized educational programs (IEP) for handicapped students.

- 17 states (33%) required the participation of the school nurse in the development of individualized education programs.

While only one third of the states mandated participation of the nurse in IEP development, several states developed specific guidelines for the provision of specific procedures as revealed in an independent survey. In 1985, state directors of health and education identified those states that had guidelines or protocols governing complex nursing procedures. Guidelines for catheterization were available in 19 states; for seizure management in 15 states; for colostomy/ileostomy care in 14 states; positioning in 14 states; and tube feeding in 13 states.[13]

School Based Clinics

Beginning in 1970, some schools established on site comprehensive primary health care clinics.[14] Currently more than 120 operate in 60 communities.[15] The increase in primary health care clinics has resulted from changes in economic and social norms, advances in medical technology and the growing populations of working mothers and single parents who are demanding an appraisal of existing school health services.[1]

- 6 states (12%) had guidelines for operating school based clinics; 1 state (2%) mandated the guidelines.

Child Abuse

The various categories of child abuse include physical abuse, verbal abuse, sexual abuse, general neglect, emotional neglect, abandonment, and failure to thrive because of inadequate supervision. It has been estimated that the incidence of such abuse ranges from 500,000 to 1 million cases annually. Perhaps as much as two thirds of the abuse or neglect is directed toward children of school age.[16]

- 51 states (100%) required school personnel to report any evidence of child abuse; in 49 states (96%) this reporting is mandated by law.

AIDS Policies

The Presidential Commission on the Human Immunodeficiency Virus Epidemic recommended school systems establish a board-developed policy, with accompanying guidelines for dealing with an individual with HIV infection in the school before being confronted with the first case. The commission recommended the policy be flexible and allow each case to be dealt with on an individual basis based on medical facts.[17]

- 23 states (45%) had a policy in regard to students who have been diagnosed as having AIDS. Of these, 6 states (12%) allowed students with AIDS to attend school, 27 states (53%) admitted students on a case-by-case basis.
- 25 states (49%) had a policy in regard to employees who have been diagnosed as having AIDS; 3 states (6%) did not restrict contact with students, 21 states (41%) restricted contact on a case-by-case basis.
- 1 state (1%) restricted school employees with AIDS from having contact with students.

Nationally, the Centers for Disease Control has released recommendations for the handling and disposing of body fluids.

- 40 states (78%) had guidelines governing the handling and disposing of body fluids. Of these, 1 state (2%) mandated these guidelines.

Health Promotion Programs for Staff

Health promotion programs for faculty and staff have demonstrated significant benefits: reduced absenteeism, reduced hospitalization, reduced medical care claims, increased productivity, improved morale, and improved quality of instruction.[18] While requiring a physical examination has been customary for many states, the promotion of a worksite health promotion program is relatively new.

- 25 states (49%) required physical examination for school employees at some time.
- 23 states (45%) required pre-employment exams.
- 3 states (6%) required annual examinations and 3 states (6%) required an exam less often than annual.
- 3 states (6%) had a policy supporting employee health promotion programs in the public schools.

Summary

A legal basis for health service programming exists in almost two-thirds of the states. Although a few states provide credentialing opportunities for school physicians, school nurse practitioners and health aides, most states have regulations regarding the employment of the school nurse. Health service programming starts with immunizations and health screenings required before entry to kindergarten and continues through a student's academic career with periodic screenings for hearing and vision disorders, and scoliosis required by many states. Other mandated responsibilities of the health service program include prevention and control of disease, development of a nursing care plan for children with handicaps, provision of emergency care, and supervision of optimum sanitary conditions within the school.

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SCHOOL HEALTH ENVIRONMENT

"Healthful school living...refers to the provision of a healthful physical and emotional environment, a healthful school day, and healthy school personnel...The school system and public health department are partners in fact, if not in action, in providing a safe and healthful environment."[1]

The World Health Organization has defined environmental health as the control of those factors in the physical environment that effect physical development, health and survival.[2] Between the ages of 5 and 18, a school child in the United States will spend at least 180 days in school each year, nearly one quarter of an individuals' waking time during the 13 school years. Environmental factors can have a significant impact on the individual student during the important, developmental years. A healthy school environment encompasses social, psychological and physical factors. Physical factors include a school building with appropriate illumination, ventilation, heating, and acoustics that is maintained in a sanitary condition. The social and psychological environment should be one which facilitates learning and personal growth and development in a stimulating, enjoyable, and aesthetically pleasing atmosphere. The school can be a healthful, compatible place that enhances well being and learning, or it can be a place that is hazardous to health and hinders the learning process.[3]

State Organization

Forty states (78%) reported legislation, beyond federal requirements, establishing a legal basis for a healthful school environment. Of the 40 states, 34 (85%) mandated health and safety practices by law. Table 3.1 lists state requirements.

In 31 states (61%), state boards of education addressed a healthful school environment. Of the states taking formal action, 5 states (16%) had passed resolutions and/or passed by-laws, 14 (45%) had passed policy statements, and 2 (6%) had passed position papers supporting a healthful school environment. Other formal actions taken by the states included guidelines, regulations, administrative codes, rules, school programs, handbooks, and accreditation standards.

State approaches in addressing the needs of the school health environment varied considerably. Twenty-seven states (53%) had a state-level administrative office specifically charged with directing environmental health and sanitation in the public schools. The state-level department exercising primary responsibility for monitoring the school environment was the health department in 15 states (30%), the education department in 11 states (21%), and the responsibility was shared by both the health and education departments in 18 states (35%). The 7 other states (14%) listed state agencies such as safety management, human resources, environmental department, industry and labor, social and health services as the department responsible for monitoring the school health environment.

State Coordination

The quality and effectiveness of a healthy school environment can be enhanced by providing specific funding, conducting evaluations of environmental programs, developing manuals or guidelines to assist local districts in

assuring a healthful school environment, and coordinating planning meetings with other state agencies.

- 11 states (22%) allocated funds specifically for a healthful school environment beyond the salary of state personnel. Amounts ranged from $20,000 to $1,250,000.
- 16 states (31%) conducted evaluations to ascertain the effectiveness of school environment programs.
- 26 states (51%) used a manual to assist local districts in developing a healthful school environment. Of the states without a manual, 4 states (8%) reported they had plans to develop one. Thirteen (50%) of the states with manuals reported the manuals were currently being revised.

Some environmental health representatives met at least once a year with a representative from other state-level departments to coordinate programming.

- 22 states (43%) met with a food service representative.
- 17 states (33%) met with a school health services representative.
- 17 states (33%) met with a health education representative.
- 11 states (22%) met with a physical education representative.
- 8 states (16%) met with a guidance and counseling representative.
- 7 states (14%) met with a school psychology representative.

Twelve (24%) states had a state-level health advisory panel. Reported meeting times for the panels ranged from 2-5 times a year.

Personnel

The use of sanitarians represents one strategy schools can use to assure a safe and healthful school environment. Duties of a school sanitarian, as outlined by Callen and Rowe[4] include inspections and enforcement of environmental standards; identification of potential hazards; coordination of maintenance, custodial, cafeteria and other staff; and the development or revision of operations manuals and standards of practice aimed at reducing or eliminating avoidable health and safety hazards.[4]

- 27 states (53%) provided certification for sanitarians; 18 of these states (35%) required the certification by law (Table 3.1).

Certification to become a sanitarian varies considerably among the 27 states requiring certification.

- 22 states (81%) listed a baccalaureate degree as the minimum educational requirement.
- 4 states (15%) required either special training or college course work in the natural sciences.
- 14 states (52%) required a practicum.

In 17 states sanitarians were required to attend in-service programs to maintain their certification, in 20 states this was not a requirement.

Programming

Environmental Standards and Inspections

Basic to guaranteeing a healthful school environment are environmental standards developed by the state, and enforced through periodic inspections. These standards may be mandated through state law or recommended by various state agencies. Table 3.2 contains the number of states that established various standards for regulating the school environment while Table 3.1 lists which states required those specific standards.

- 45 states (88%) regulated school kitchens.
- 45 states (88%) regulated fire safety.
- 41 states (80%) mandated accessibility for the disabled.
- 32 states (63%) regulated ventilation.
- 31 states (61%) mandated safety glass.
- 30 states (59%) mandated vermin control.
- 29 states (57%) regulated heating & cooling.
- 27 states (53%) regulated lighting.
- 10 states (20%) regulated acoustics.

School Environmental Inspections

Table 3.3 identifies the number and percentages of states with various requirements for school inspections along with the frequency of inspection. The various aspects of the school environment which required inspections, at least annually, are listed in Table 3.1.

- 46 states (90%) inspected cafeterias and kitchens.
- 40 states (78%) inspected school buses.
- 43 states (84%) required fire inspections of school facilities.
- 29 states (57%) inspected rest rooms.
- 29 states (57%) inspected laboratories.
- 26 states (51%) inspected classrooms, gymnasiums, and locker rooms.

Table 3.2
Number of States with Established Standards for the School Environment

Sites	Level of Standard	
	Standard Mandated by Law N (%)	Standard Recommended N (%)
Lighting	27 (53)	15 (29)
Ventilation	32 (63)	10 (19)
Accessibility for Disabled	**41 (80)**	**4 (8)**
Safety Glass	**32 (61)**	**7 (14)**
Acoustics	10 (20)	14 (27)
Vermin Control	30 (59)	7 (14)
School Kitchen	**45 (88)**	**4 (8)**
Fire Safety	**45 (88)**	**2 (4)**
Heating & Cooling	29 (57)	13 (25)
Asbestos	32 (63)	6 (12)

Table 3.3
Number of States That Mandated Inspections According to Frequency of Inspection

Sites	Frequency		
	1 Per Year Or Less N (%)	More Than 1 Per Year N (%)	No Inspection Required N (%)
Cafeteria	27 (53)	19 (37)	4 (8)
Kitchen	26 (51)	20 (39)	3 (6)
Classroom	**20 (39)**	**6 (12)**	**24 (47)**
Stairs	**19 (37)**	**6 (12)**	**25 (49)**
Restrooms	23 (45)	6 (12)	20 (39)
Health Room/ Sickroom	20 (39)	5 (10)	24 (47)
Playground/Athletic Field	**17 (33)**	**6 (12)**	**27 (53)**
Gymnasium	20 (39)	6 (12)	24 (47)
Locker Rooms	20 (39)	6 (12)	24 (47)
Laboratories	**23 (45)**	**6 (12)**	**21 (41)**
Waste Disposal Site	**15 (29)**	**10 (20)**	**18 (35)**
Safety Inspection Buses	25 (49)	15 (29)	5 (10)
Fire Inspection	36 (70)	7 (14)	3 (6)

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Table 3.1 State Requirements Regulating the School Environment

● = Indicates that the item is mandated or required.
✕ = Indicates that the item is recommended.

	Alabama	Alaska	Arizona	Arkansas	California	Colorado	Connecticut	Delaware	D.C.	Florida	Georgia	Hawaii	Idaho	Illinois	Indiana	Iowa	Kansas	Kentucky	Louisiana	Maine	Maryland	Massachusetts
Legal Basis for Program	●		●		●	●		●	✕	●	●		●	●	●		●	●	●	✕	●	●
Certification Sanitarian			●	✕	✕	●	●	✕		●					✕			●	●		●	
Environmental Standards Lighting	●	✕		●	✕	●	✕	●	✕	●	●	✕	●	●	●	✕		●	●	●	✕	●
Ventilation	●	●		●	●	●	✕	●	✕	●	●	✕	●	●	●	✕		●	●	●	●	●
Acoustics	●	✕			✕	✕	✕		✕	✕		✕	●		●	✕					✕	●
Vermin Control	●	✕	●	●	●	●	●		●	✕	●	✕			●	✕		●	●		●	●
School Kitchen	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	✕	✕	●	●	●	●	●
Fire Safety	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
Heating & Cooling	●	●	✕	●	●	●	✕	✕	●	●	●	✕	●	●	●	✕		●	●	●	●	●
Asbestos	●	●	●	✕	●	●	●	●	●	●	●	●	●	●	●	✕		✕		●	●	●
Accessibility for Disabled	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
Safety Glass	●	●	●		●	✕	✕		●	●	●	✕	●	●	●	●	●			●		●
Annual Sanitary Inspection Kitchens	●	●	●	●		●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	
Cafeteria	●	●	●	●		●	●	●	●	●		●	●	●	●	●		●	●		●	
Classrooms				●	●					●			●	●			●		●			
Restrooms				●			●			●			●	●			●		●			
Gymnasium					●		●			●			●	●			●		●			
Locker Rooms				●			●			●			●	●			●		●			
Laboratories				●	●		●	●		●			●	●			●		●			
Waste Disposal Site	●	●	●	●			●						●					●	●			
Clinic/Sick Room							●		●	●			●	●					●			
Stairs					●					●			●	●			●		●		●	
School Bus Inspection	●	●		●	●	●	●	●		●	●	●	●		●	●	●	●	●	●	●	
School Fire Inspection			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			●	
Accident Reporting Policy					●			●				✕				●		✕	✕			
Emergency Disaster Plan			●	✕	●	●		●	●	●	●	●		✕	●	✕	●	●	●	●		
Smoking Policy	●	●			●		●	●	●	●		●	●	●		●		●				

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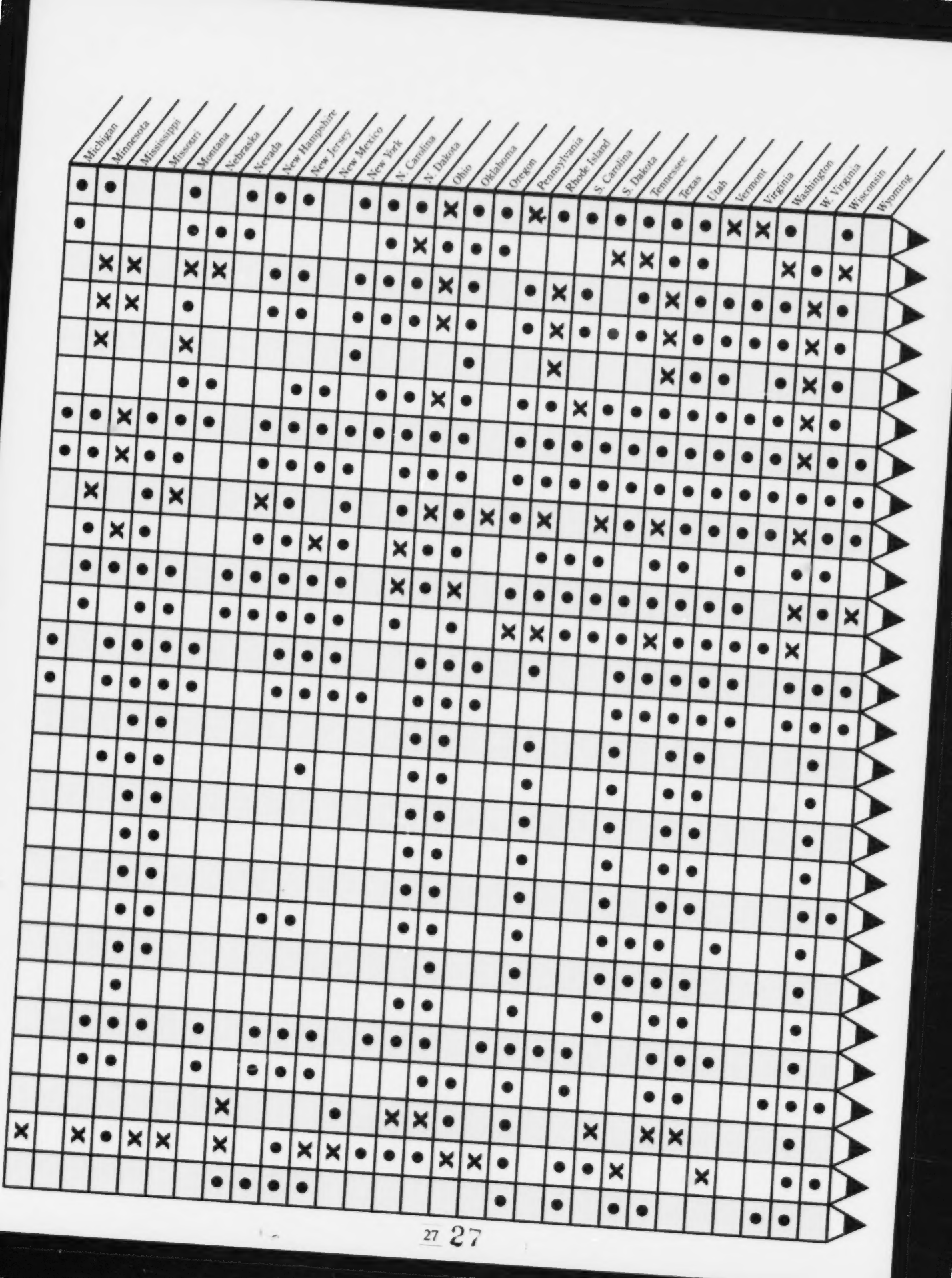
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N. Carolina
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Oregon
Pennsylvania
Rhode Island
S. Carolina
S. Dakota
Tennessee
Texas
Utah
Vermont
Virginia
Washington
W. Virginia
Wisconsin
Wyoming

Sanitary Inspections

Table 3.1 lists, by state, the areas for which sanitary inspections were mandated by law. Sanitarians responsible for the inspections were employed by various agencies.

- 21 states (41%) used local health department sanitarians.
- 9 states (18%) used state department sanitarians.
- 14 states (27%) shared the responsibility between the local and state departments of health.
- 7 states (14%) used various state departments (e.g., safety management, environmental improvement, industry and labor, department of education, environmental resources, and school recognition and approval).

Fire Inspections

School facility fire inspection were required in 43 states (84%). Seven states required more than one inspection each year. The individual responsible for conducting the fire inspection varied.

- 19 states (37%) used a local fire department official.
- 11 states (22%) used the state fire inspectors.
- 19 states (37%) shared the responsibility between local and state fire inspectors.
- 2 states (4%) used other departments (e.g. the state fire marshall or the department for code enforcement.)

Safety Measures and Programs

Accidents are the major cause of injury and death among students. Reporting accidents that occur at school are suggested if the accident resulted in an injury to a pupil severe enough to cause the loss of one-half day of school or more.[5] Table 3.1 lists states that report accidents.

- 7 states (14%) mandated reporting serious accidents; 9 states (18%) recommended this practice.
- 8 states (16%) supplied a specific accident reporting form.
- 6 states (12%) collected and analyzed accident forms to improve the safety of students while in school.

Schools with effective school safety programs initiate three elements: a written policy statement, a safety committee, and safety inspections.[6] (The number of states requiring safety inspections was discussed in the previous section.) Responsibility for developing a policy statement and safety plan often is a shared responsibility within school districts. The standards for school nursing[7] suggest school nurses in consultation with the school administration establish, review, and revise policy and protocols for emergency procedures, safety measures and programs.

- 23 states (45%) required schools to develop a plan/policy to ensure the health and safety of students and staff in the event of an emergency or disaster; 14 states (27%) recommended that guidelines for disaster planning be instituted (Table 3.1).

Safety Restraints on School Buses

Schwartz and Klenetsky[8] report, nearly all states require children under five to be secure in either a car seat or a child restraint devise when riding in an automobile. However, most children are denied the same protection when being transported to school in a school bus. No consensus exists regarding safety belt use in school buses. The National Research Council, recommended raising the minimum height of the backs of school bus seats from the current 20 inch standard to 24 inches in place of requiring safety belts in school buses. The decision to not recommend seat belts was opposed by such associations as the American Academy of Pediatrics, the American College of Emergency Room Physicians and the American Medical Association.[9]

- 3 states (6%) required safety restraints in school buses.

Asbestos in the School Environment

Asbestos control in schools has been called the most important and pressing environmental health concern for public policymakers.[10] The Asbestos Hazard Emergency Response Act requires local education agencies identify asbestos containing materials in school buildings and take appropriate action to control the release of fibers.[11] Civil and criminal penalties are proposed for violators. And yet, less than one-half of the states surveyed reported that a plan had been developed to meet the 1989 federal regulation to dispose or cover asbestos fibers.

- 25 states (49%) developed a plan to meet the 1989 federal regulation to dispose or cover asbestos fibers in the schools; 22 states (43%) had developed no plan (Table 3.1). Of the 25 states with plans to meet the 1989 federal regulation, 10 (40%) had state funds available for the districts to meet this regulation; 13 (52%) did not have funds.

Smoking Policies

The National Adolescent Student Health Survey reported that 1 in 6 eighth graders and 1 in 4 tenth graders reported smoking in the past month.[12] To promote an environment which provides a consistent message with the message received during health instruction, a smoke-free school is desirable. The American Cancer Society, the American Heart Association, and the American Lung Association have joined together to work for a Tobacco-Free Young America by the year 2000. Several states have attempted to attain this goal by banning all smoking and tobacco products within the school for both staff and students.

- 20 states (39%) mandated tobacco-use prevention instruction.
- 22 states (43%) reported that they have a law or regulation that restricts smoking in public schools. Of these states, 12 restricted use by teachers and staff as well as students (Table 3.1).

Summary

Almost fourth-fifths of the states had a legal basis for a healthful school environment. Required standards most often focused upon the school kitchens, fire safety, accessibility for the disabled, safety glass, vermin control, heating/cooling, and lighting. Most states required fire and sanitary inspections. Certification to become a sanitarian was available in more than one-half of the states. Less than one-third of the states required accident reporting even though almost one-half of the states required that schools develop a plan to ensure the health and safety of students and staff in the event of an emergency or disaster. Only 50% of the states had developed a plan to meet the 1989 Federal Regulation to dispose or cover asbestos fibers in the schools.

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PHYSICAL EDUCATION

"...one community organization — the schools — underpins the whole effort to achieve the goal of national fitness. The provision of quality programs to students, from kindergarten through high school, could furnish the needed knowledge and skill base for lifespan physical activity."[1]

Physical education programs provide meaning to movement in the life of a child as well as self-expression and social development. Further, these programs can improve or maintain cardiovascular and respiratory efficiency, motor performance (endurance, strength, agility, balance, speed, and flexibility), the frequency and duration of exercise, and cognitive performance[2]. Although enhancement of cognitive performance currently is not a commonly stated goal of physical education, evidence supports its existence[3,4] Among physical educators the two most important and unique purposes of physical education are to enhance physical fitness and to promote the development of large muscle motor skills[4].

Physical education programs can serve as a health promotion modality through 1) regular exercise which is recognized as a major component of a healthy lifestyle, 2) the development of healthy characteristics that will continue to "track" into adulthood, 3) the development of a health-oriented focus which is a goal consistent with the origins of physical education.[4]

State Organization

Forty states (78%) have established a legal basis for physical education through educational codes or other state legislation. In 36 states (71%), physical education was mandated by law (Table 4.1). In 17 states (14%), state boards of education addressed physical education by issuing policy statements, bylaws, resolutions, and position papers.

The Department of Education/Instruction was responsible for physical education programming in 50 states (98%). (One state reported that programming was a local option.) In 38 states (75%) an individual at the state level was charged specifically with directing/supervising physical education programs in the public schools. Often the individual was responsible for other programs in addition to physical education, such as health education in 23 states (45%), safety in 13 states (26%), driver education in 10 states (20%), and school health services in 8 states (16%). In 13 states (26%) an additional staff person directed an adapted physical education program.

State Coordination

The quality and effectiveness of physical education programs can be enhanced by providing specific funding, guidelines or a manual detailing programming, a systematic evaluation of district level programming, and the coordination of the physical education program with other state-level departments responsible for school health.

- 6 states (12%) allocated funds specifically for physical education beyond the salary of state personnel.
- 41 states (80%) provided guidelines to assist local districts develop a physical education program. Of the 10 states that did not have a guide, 4 reported that a guide was being developed. Guides in most states were published between 1975 and 1988. Sixteen states indicated the guide was currently being updated.

- 24 states (47%) evaluated the effectiveness of the state's physical education programs. Four states (8%) conducted an annual evaluation; 1 state (2%) conducted a semi-annual evaluation. Evaluations in other states were conducted every 3 to 10 years.

Most physical education directors met at least once a year with a representative of other state-level departments to coordinate programming.

- 34 states (67%) met with a health education representative.
- 26 states (51%) met with a school health services representative.
- 16 states (31%) met with a food services representative.
- 15 states (30%) met with a health environment representative.
- 12 states (24%) met with a guidance and counseling representative.
- 6 states (12%) met with a school psychology representative.

Personnel

Ideally teachers should be specifically prepared and certified in physical education to instruct at either the elementary or secondary level. Often, the requirements set by professional preparation programs are more demanding than state certification requirements. For example, the professional preparation standards may range from 18 to 54 hours of credit, while in a few states a teacher can be certified with as few as 9 hours of physical education instruction.[4]

The National Children and Youth Fitness Study II found that a high proportion of physical education classes are taught by specialists (79%) but that as many as one-third of these specialists do not hold valid certification in physical education. According to the NCYFS II study there is a concern that some schools do not want to spend the money to hire certified physical education specialists.[5]

Table 4.1 lists the number of states that required or recommended certification in physical education. While three-fourths of the states indicated that a K-12 certification was required, more than one-half of the states also required specific certification for the various grade levels: elementary, middle school, or secondary.

- 38 states (75%) required certification K-12; 1 state (2%) recommended this practice.
- 29 states (57%) required certification at the elementary level; 3 states (6%) recommended this practice.
- 30 states (59%) required certification at the middle school level; 3 states (6%) recommended this practice.
- 35 states (69%) required certification at the secondary school level; 2 states (4%) recommended this practice.

Depending upon the state, certification to teach physical education was available as a separate certificate or could be obtained in combination with health education or another topic.

- 17 states (33%) provided a separate certification for physical education at the elementary level; 4 states (8%) had a combined physical education/health education certification at this level.
- 13 states (26%) provided a separate certification for physical education at the middle school level; 4 states (8%) had a combined physical education/health education certification at this level.
- 19 states (37%) provided a separate certification for physical education at the secondary level; 4 states (8%) had a combined physical education/health education certification at this level.
- 18 states (35%) provided a separate certification for physical education K-12; 10 states (20%) had a combined physical education/health education K-12 certification.

Continuing education program are a means to promote currency and competency among the teachers certified in physical education.

- 31 states (61%) required continuing education units in order to maintain certification.

Programming

Three of the 1990 health objectives for the nation specifically address children's physical fitness. The objectives were written to increase the number of students who regularly participate in cardiorespiratory fitness activities to over 90 percent; to increase the proportion of students participating in daily school physical education to over 60 percent; and to assess the physical fitness of at least 70 percent of children and youth.[6] These objectives are based on the assumption that physical education is an important vehicle in developing cardiorespiratory exercise habits that will endure through adulthood and result in reducing the risk for cardiovascular disease.

Curriculum Requirements

Since virtually every child attends school, particularly in the elementary years, schools can play a pivotal role in promoting physical fitness and exercise habits in students.[5]

Table 4.2
Average Number of Physical Education Hours in States with a Time Requirement

States	Grades 1-6	7-8	9-12	1-12
Alabama	90.00	90.00	37.50	72.50
Arkansas	36.00	37.50	75.00	49.25
California	60.00	120.00	120.00	90.00
Connecticut	0	0	30.00	10.00
District of Columbia	44.50	90.00	67.50	59.75
Florida	*	*	90.00	30.00
Georgia	60.00	60.00	90.00	70.00
Hawaii	63.00	90.00	45.00	61.50
Idaho	**	70.00	35.00	23.33
Indiana	45.00	60.00	45.00	47.50
Kentucky	57.50	45.00	22.50	43.75
Louisiana	*	*	*	*
Maine	*	*	*	*
Maryland	*	*	33.00	11.00
Massachusetts	60.00	60.00	30.00	50.00
Minnesota	90.00	80.00	35.00	70.00
Missouri	36.00	36.00	72.00	48.00
Montana	*	75.00	37.50	25.00
New Hampshire	37.50	37.50	37.50	37.50
New Jersey	*	*	*	*
New York	72.00	75.00	75.00	73.50
Ohio	*	48.00	30.00	18.00
Rhode Island	*	*	*	*
South Carolina	35.00	39.00	37.50	36.50
Tennessee	84.00	72.00	45.00	69.00
Texas	33.67	90.00	67.50	54.33
Vermont	36.00	36.00	45.00	39.00
Virginia	0	108.00	54.00	36.00
Washington	60.00	60.00	75.00	65.00
West Virginia	28.50	28.50	33.75	30.25
Total	1028.68	1507.50	1387.75	1228.17
Mean@	54.14	65.54	51.40	45.49
S.D.	19.57	25.10	24.40	21.95

* P.E. required but unable to determine hours

- 38 states (75%) mandated physical education in the elementary grades.
- 39 states (77%) mandated physical education in both middle schools and secondary schools.

The inclusion of a national health objective calling for daily physical education classes underscores the importance of frequent physical education classes. The National Children and Youth Fitness Study II found that only 36 percent of students in grades 1 through 12 enrolled in daily physical education.[5]

- 7 states (14%) mandated daily physical education classes for elementary and middle schools
- 5 states (10%) mandated daily physical education classes for secondary schools

Almost one-third of the states had established a specific time requirement for students enrolled in physical education classes. Table 4.2 contains the average number of physical education hours per year per grade level.

- 31 states (60%) had a time requirement for sometime in grades 1-12.
- 19 states (37%) had a time requirement for grades 1 through 6.
- 23 states (45%) had a time requirement for grades 7 through 8.
- 27 states (53%) had a time requirement for grades 9 through 12.

The average number of hours per year required in elementary school were 54.1, while only 51.4 were required in secondary school. While hours required provide a beginning basis for understanding the potential for physical education activities, it must be coupled with the actual time spent in physical activity. While actual time was beyond the scope of this survey, other researchers have found that the actual time spent in moderate to vigorous physical activity may be as little as two or three minutes per class period.[7]

Fitness Testing

The 1990 Health Objectives for the Nation issued by the Public Health Service recommended physical fitness testing of students. The specific target was to have at least 70% of children and adolescents ages 10-17 participating in such an assessment by 1990.

There are a number of fitness tests available. Physical fitness testing such as the 1958 AAHPERD Youth Fitness test emphasized motor performance variables. With the publication of AAHPERD Health-Related Physical Fitness Test Program in 1980, a new concept for nationwide physical fitness was introduced. This fitness test emphasized the development and maintenance of those components currently recognized as basic to health, such as, cardiorespiratory endurance, body composition, muscle strength, and flexibility. Prior to the AAHPERD program, the focus had been on skill related fitness, such as, speed, coordination, balance, and agility.[8]

The President's Council on Physical Fitness and Sports (PCPFS) award focuses on skill related fitness. The Fitnessgram, a test developed by Campbell's Institute for Health and Fitness, focuses on health-related components

Table 4.1 State Requirements Regulating Physical Education

● = Indicates that the item is mandated or required.
✖ = Indicates that the item is recommended.

	Alabama	Alaska	Arizona	Arkansas	California	Colorado	Connecticut	Delaware	D.C.	Florida	Georgia	Hawaii	Idaho	Illinois	Indiana	Iowa	Kansas	Kentucky	Louisiana	Maine	Maryland	Massachusetts
Legal Basis for Program	●	●		●	●		●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
Certification Available Elementary			●	✖	●	●	●	●	●	●				✖	●			●	●		●	●
Middle School				●	●		●	●	●			✖	●	✖	●			●	●		●	●
High School			●	●	●	●	●	●	●	●		✖	●	●	●			●	●		●	●
Physical Education Requirements Elementary	●			●	●		●		●	●	●		●	●	●	●	●	●		●	●	●
Middle School	●			●	●		●	●	●	●	●	●	●	●	●	●		●		●	●	●
High School	●	●		●	●		●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
Required Fitness Testing	●			●	●	✖	✖		✖		✖	●			✖						✖	
Results Reported to Student					✖	✖	✖		✖		✖	●			✖							
Results Reported to Parents					✖	✖	✖		✖		✖	✖			✖							
Individualized Program Prescribed					✖		✖		✖		✖				✖						✖	

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similar to the 1980 AAHPERD program. Unlike other tests, the Fitnessgram provides a computerized report for parents and students. Most states do not have a state policy on fitness testing, less than one-fourth of the states required a fitness test. Table 4.3 contains data on various levels of activities related to fitness testing.

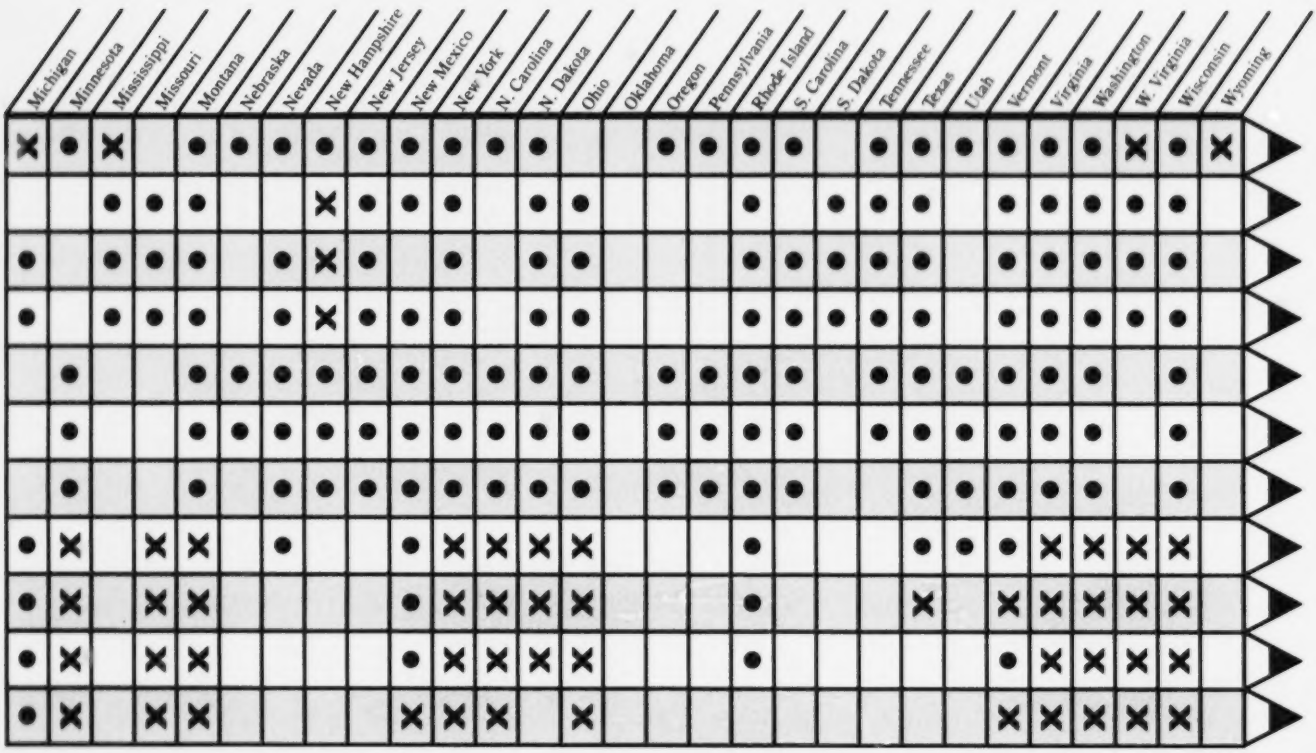
- 11 states (22%) required periodic fitness testing; 17 states (33%) recommended this practice.
- 4 states (8%) required fitness results be reported to students; 19 states (37%) recommended the practice.
- 1 state (2%) required that individualized fitness programs be prepared for the students; 18 states (35%) recommended this practice.
- 4 states (8%) required that the results be reported to parents; 18 states (35%) recommended this practice.

Summary:

Forty states had established a legal basis for physical education programs. In most states, coordination of physical education programs was provided through a guide/manual design to assist local districts in developing a local program. While more than three-fourths of the states required teachers to obtain K-12 certification, less than one-third provided separate physical education certification for elementary, middle school, or secondary teachers. Most states offered a dual health and physical education certification. Few states mandated daily physical education programs or required physical fitness testing. However, three-fourths of the states mandated physical education programs in elementary and secondary school. The average number of physical education hours required in elementary school per year was 54; in secondary schools 51 hours per year were required.

Table 4.3
Number and Percentage of State Recommendations for Specific Physical Fitness Tests

	N (%)
President's Council on Health Fitness & Sports Test	33 (64.7)
Youth Fitness Test (1958) (AAHPERD)	31 (60.8)
Health-Related Youth Test (1980) (AAHPERD)	**32 (67.2)**
Campbell Fitnessgram (Institute for Aerobics Research)	**24 (47.1)**
Amateur Athletic Union (NAAU)	9 (17.6)
State-developed Fitness Test	10 (19.6)
Other	9 (17.6)



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SCHOOL FOOD AND NUTRITION SERVICES

"If children eat a school breakfast, they are less likely to be hungry and more able to concentrate on their school work. Better nutrition can help decrease illness, so students are more healthy while they are in school, and thus can learn more. Less illness also means children will be in school more often. A healthy student in class obviously learns more than a sick child at home. Breakfast programs entice children to be on time and to come to school. All of these factors together result in a healthier and generally happier child, a more productive school day, and a better educated child."[1]

With the enactment of the National School Lunch Act (NSLA) in 1946, the school food service program became an integral part of the comprehensive school health program. It has since grown to a service that provides 27 million lunch and three million breakfast trays daily. The goals of the school food service program are twofold: to provide nutritionally adequate meals at a reasonable price and to serve as a learning laboratory for health and nutrition education.[2]

The school lunch program's nutritional goal is to provide one-third of a child's Recommended Dietary Allowances (RDA) as delineated by the National Research Council and National Academy of Sciences. Each lunch day does not have to provide exactly one-third of the recommended daily nutrients, but this goal should be attained as the lunches are averaged over time. To be consistent with the *Dietary Guidelines for Americans* issued by the US Departments of Agriculture, and Health and Human Services, school lunches should be modified to reduce the intake of fat, sugar, and sodium.[3]

With good planning, school lunch programs can play an effective role in nutrition education. Nutrition education programs can help students expand their knowledge of nutrition, develop useful consumer skills for making wise food choices, develop greater food acceptability, and participate more readily in school food programs.[3]

State Organization

A food service program was mandated by law in 20 states (40%). In 32 states (63%) an educational code or legislation beyond federal requirements established the legal basis for the program (Table 5.1). State boards of education in some states had addressed school food service. These actions included policy statements in 16 states, resolutions in 8 states, by-laws in 3 states, and a position paper in 1 state. Other formal actions included rules and regulations, administrative codes, and directives.

In 50 states (98%), a state administrative office within the State Department of Instruction was charged specifically with directing or supervising the school food and nutrition program.

State Coordination

The quality and effectiveness of school food service programs can be enhanced through the provision of specific funding, the availability of a policy and procedure manual, the systematic evaluation of current programming, and the coordination of programming with other state directors. The level of state involvement in these activities varied considerably.

- 18 states (35%) allocated between $130,000 and $45,000,000 for programming in addition to the salary for state personnel.
- 32 states (63%) had a policy and procedure manual to assist local districts in the delivery of the school food service programs.

- 28 states (55%) evaluated the effectiveness of their school food service program. Nine states conducted an annual evaluation; 3 states conducted a semi-annual evaluation; and 16 states reported a frequency of evaluation ranging from three to eight years or "as needed."

Some food and nutrition services representatives met at least once a year with a representative from other state-level departments to coordinate programming.

- 23 states (45%) met with a health education representative.
- 12 states (23%) met with a school health environment representative.
- 9 states (18%) met with a physical education representative.
- 7 states (14%) met with a health services representative.
- 4 states (8%) met with a guidance and counseling representative.
- 2 states (4%) met with a school psychology representative.

Personnel

The American School Food Service Association (ASFSA) whose mission is to support the implementation of nutritionally sound, financially accountable, and acceptable child nutrition and nutrition education programs recognized and validated specific functions and tasks for school nutrition program personnel. In 1984 the association outlined the competencies required of the various levels of personnel working in the school nutrition program: food service directors, food service managers and food service general and technical assistants.[4] Competencies required of the food service director and manager are essential in providing an effective child nutrition and nutrition education program. Table 5.1 contains a list of states that require employment of a food service director and manager.

- 10 states (20%) required local school districts to employ a food service director.
- 8 states (16%) required local school districts to employ a food service manager.
- 30 states (59%) specified various levels of positions for food service managers.

Food Service Director

The food service director plans, organizes, directs, and administers a school food service and nutrition education program. The director is responsible for program planning, personnel management, resource allocation, financial management, facilities planning, organization and implementation of a program of nutrition education, and establishing a marketing and communications program.[4]

- 5 states (10%) mandated certification as a condition of employment; 21 states (41%) provided certification opportunities (Table 5.1).
- 10 states (20%) used ASFSA guidelines as a model for certification requirements.
- 3 states (6%) reported that their certification standards were not as strict as the ASFSA guidelines.
- 8 states (16%) had no minimum educational requirements.
- 5 states (10%) required a bachelor's degree and 3 states (6%) required a master's degree.
- 4 states (8%) required a supervised practicum.
- 1 state (2%) required the food service director to be a registered dietitian with the American Dietetic Association.

Food Service Manager

The basic responsibilities of the food service manager who reports to the food service director, include staff supervision, implementation and coordination of food services, nutrition education, food production and student service.[4]

- 4 states (8%) mandated certification as a condition of employment; 19 states (37%) provided certification opportunities (Table 5.1).
- 10 states (20%) used ASFSA guidelines as a model for certification requirements.
- 3 states (6%) reported certification standards are not as strict as the ASFSA guidelines.
- 9 states (18%) had no minimum educational requirements.
- 6 states (12%) required a high school diploma and 3 states (6%) required at least a 10th grade education.
- 4 states (8%) required a supervised practicum.

The ASFSA recommendation for educational attainment varies according to employment category under consideration-Level 1 to Level 4. ASFSA guidelines state that only Level 1 requires a baccalaureate degree.[3] Thirty states (29%) listed various employment levels for the food service manager, but none required that the food service manager be a registered dietician.

Programming

School Lunch Program

The National School Lunch Program (PL 79-396) was initiated in 1946 to promote the health of the nation's children as well as to increase support for the consumption of domestic agriculture products. The program was expanded in 1966 when the Child Nutrition Act (PL 89-642) authorized the school milk program and the school breakfast program. These legislative initiatives were designed to provide nutritious meals at full, reduced, or no cost to students enrolled in participating schools according to specific national eligibility criteria based on family size and income.[5] Table 5.1 lists states that mandated or recommended a school lunch program for Chapter 1 and all other schools. Even though less than one-half of the states had policies recommending or mandating food service, a nation-wide study in 1983 revealed almost 98% of all students have access to the school lunch program.[5] This reinforces a major limitation of this document as one which presents the state requirements but can not be used to identify programming at the local educational level.

- 12 states (21%) mandated the USDA lunch program in all schools; 10 states (20%) recommended the program.
- 4 states (8%) mandated the USDA lunch program in Chapter 1 schools; 7 states (14%) recommended the program.

School Breakfast Program

The Child Nutrition Act of 1966 (PL 89-642) initially established the school breakfast program as a pilot program; subsequent legislation permanently authorized the program. The intent of the legislation was to ensure the program be made available to the nutritionally needy, a goal which was not realized.[4] School breakfasts are provided to only 3.9 million of the approximately 12 million students who qualify for a free or reduced cost breakfast.[5] Table 5.1 lists the states that mandated or recommended a school breakfast program in Chapter 1 and all other schools.

- 2 states (4%) mandated the breakfast program in all schools, while 12 states (24%) recommended the program.
- 4 states (8%) mandated the breakfast program in Chapter 1 schools, while 8 (16%) recommended the program.

Nutrition Education

The Nutrition Education and Training Program (NETP), enacted in 1977, was initiated to teach children the value of a nutritionally balanced diet through positive daily lunchroom experiences, to develop curricula materials, and to train school food service personnel and teachers to deliver nutrition education. Although federal funding for the program has decreased substantially, minimal resources are still available[1].

- 48 states (94%) still administered the NETP program.

Because a relationship has been established between dietary habits and at least five of the ten leading causes of death, the importance of nutrition education has increased.[6] Further, the National School Lunch Program requires participating schools to involve students and parents in nutrition education activities.[7]

- 1 state mandated that the school cafeteria be used as a learning laboratory; 31 states (61%) recommended this practice (Table 5.1).
- 44 states (86%) reported specific state initiatives designed to promote sound nutritional practices among students.
- 1 state (2%) mandated that lunch menus be supplied to parents, while 18 states (35%) recommended this practice.

Food Service Delivery

The school lunch program, has undergone major changes in food preparation in order to comply with the Dietary Guidelines for Americans and the regulations of the USDA.[1] Although scientists continue to debate the optimal dietary level of sugar, fat, and salt for children, there is general agreement that moderation of intake is consistent with good health. The intent of the recommendation was to provide a moderate level of fat, sugar, and salt by limiting the frequency that those food items which contain large amounts of these components are served as well as limiting the quantities of these items added during food preparation.[3] Table 5.1 lists those states that had initiated programming to attain the US dietary guidelines.

- 39 states (77%) had initiatives designed to meet the USDA dietary guidelines to lower sugar, salt, and fat content in school meals.

In addition to changes in food preparation, nutrition education activities have increased. The Student Nutrition Action Program (SNAP) which was developed by parents, teachers, and administrators at an elementary school in New Mexico is an example of one such initiative. Subsequently, several schools and states across the country have adopted SNAP. This program provides nutrition education and alternative school breakfast and lunches based upon the Dietary Guidelines for America: 1) eating a variety of foods, 2) avoiding too much fat, saturated fat, and cholesterol, 3) eating foods with adequate starch and fiber, 4) avoiding too much sugar and 5) avoiding too much sodium. [8]

Furthermore, several states have restricted the sale of competitive foods beyond federal guidelines. Currently USDA regulations restrict the sale of competitive foods in the food service areas only during meal time. The sale of competitive foods which usually are of limited nutritional value compete for the students' appetite and most often run counter to the goals of the nutrition education program.[1]

- 17 states (33%) limited the sale of candy and carbonated beverages beyond the minimum federal requirements; 6 states (12%) recommended this practice (Table 5.1).

Table 5.1 State Requirements Regulating Food Service

● = Indicates that the item is mandated or required.
✖ = Indicates that the item is recommended.

	Alabama	Alaska	Arizona	Arkansas	California	Colorado	Connecticut	Delaware	D.C.	Florida	Georgia	Hawaii	Idaho	Illinois	Indiana	Iowa	Kansas	Kentucky	Louisiana	Maine	Maryland	Massachusetts
Legal Basis for Program			✖		●	✖			●	●	●	✖		●		●		✖	●	●	●	●
Required Personnel Food Service Director								●	●		●	●							●			●
Food Service Manager								●	●		●	●							●			
Certification Available Food Service Directors	✖		✖		✖			●			●								●		✖	
Food Service Managers			✖	✖	✖			●			●								●			
USDA Lunch All Schools				✖	✖			●	✖	●	●	✖				●			●	●		●
Chapter 1 Schools	✖			✖						●		✖	✖							●		●
Breakfast Program All Schools				✖	✖		✖		✖	✖		✖										✖
Chapter 1 Schools	✖			✖			✖			✖	✖	✖									●	✖
Cafeteria/Learning Lab	✖		✖	✖	✖	✖	✖		✖	✖	●	✖	✖						✖			✖
USDA Dietary Guidelines Followed	✖	✖	✖	✖	✖	✖	✖		✖	✖	✖	✖	✖	✖			✖			✖	✖	✖
Restricted Sale of Competitive Foods					●	●	●		●	●	●	✖		●					●	●		●

Summary

While 50 states had an administrative office charged specifically with supervising the school food nutrition program, only 32 states had specific educational codes or legislation that established a legal basis for the food service program. More than four-fifths of the states did not require local school districts to hire either a food service director or a food service manager. Most states did not mandate certification of either the food service director or manager. Further, most states did not mandate the provision of the school lunch or school breakfast program, but recommended these programs. Almost all states administered the Nutrition Education and Training program which is designed to teach students the value of a nutritionally balanced diet. In addition, three-fourths of the states had developed initiatives designed to meet the USDA dietary guidelines to lower sugar, salt, and fat content in school meals.

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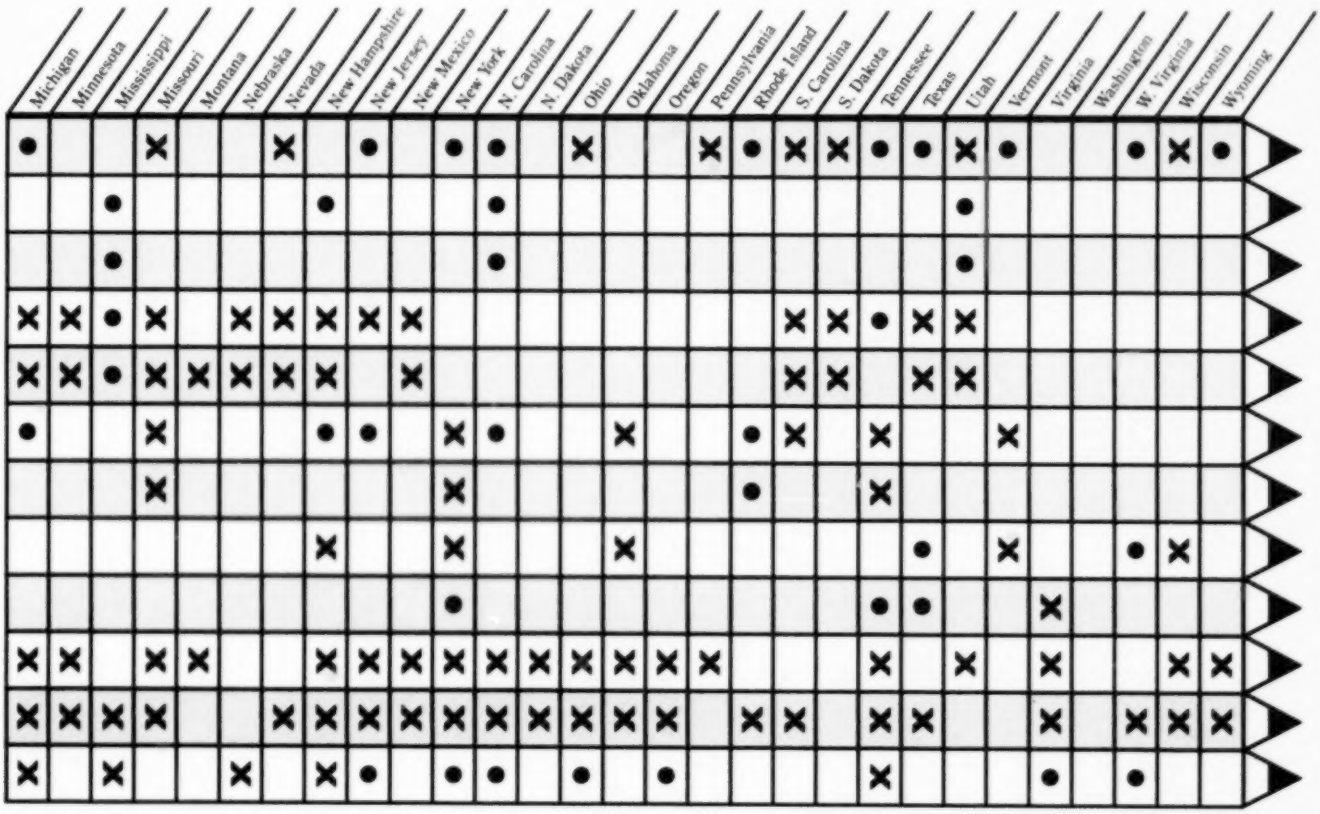


GUIDANCE AND COUNSELING

"Guidance and counseling is a program to help students integrate their educational career, civic, personal and social development. The K-12 written guidance plan provides services that help all children to make maximum use of their abilities to make positive contributions to society."[1]

School guidance and counseling traces its roots to Frank J. Parsons who supplied the framework for vocational counseling in 1909.[2] Subsequent federal legislation in 1920, 1934, and 1936 supported guidance and counseling through reimbursement for vocational guidance activities. The greatest impetus for the growth of guidance programs resulted from passage of the National Defense Education Act in 1958. The legislation provided funds for the preparation and employment of school counselors to identify, recruit, and assist talented students to pursue careers in science. Continued support for the school guidance program was enacted through the Elementary and Secondary Education Act of 1965 and its 1969 amendment. By 1971 the U.S. Office of Education declared career education a priority.[2] Although school counseling programs originally were implemented to provide vocational guidance, emphasis on developmental guidance has increased.[3] The National Health Planning and Resource Development Act of 1974 (Public Law 93-641) and the National Consumer Health Information and Health Promotion Act of 1976 (Public Law 94-317) authorized schools and their personnel to become involved in the physical, mental, and social health of their clientele.[4]

State Organization

Twenty-eight states (55%) reported educational codes or other legislation beyond federal requirements that established a legal basis for guidance and counseling programs in public schools (Table 6.1). State boards of education addressed guidance and counseling in 20 states (40%) in the form of resolutions, by-laws, policy statements and position papers. Other actions included accreditation standards, priorities, development of regulations, and budget requests.

Departments of Instruction administered guidance and counseling programs in 50 states (98%). In 48 states (94%) a state-level individual was charged specifically with directing and supervising guidance and counseling programs in public schools.

State Coordination

The quality and effectiveness of guidance and counseling programs can be enhanced through the provision of funding, the development of a model policy manual, the systematic evaluation of programs, and the coordination of the guidance and counseling component with other state agencies.

- 14 states (27%) allocated funds for guidance programming beyond the salary of state personnel. The median amount allocated was $600,000, with a range between $40,000 and $7,600,000.
- 31 states (61%) had a state guide/manual to assist local districts in developing a guidance and counseling program. Publication dates for states that had a guide ranged between 1974 and 1988. Approximately one-half of the states which had a guide indicated it was being revised. Further, 14 of the 20 states which did not have a guide reported one was being developed.

- 30 states (59%) reported the effectiveness of the guidance and counseling programs were routinely evaluated. Most states reported they conducted an evaluation every five years.

Some guidance and counseling representatives met at least once a year with a representative of other state-level departments to coordinate programming.

- 31 states (61%) met with a health education representative.
- 30 states (59%) met with a health services representative.
- 24 states (47%) met with a school psychology representative.
- 14 states (28%) met with a physical education representative.
- 14 states (28%) met with a healthful school environment representative.
- 6 states (12%) met with a school food services representative.

Personnel

The American School Counselor Association has defined the roles and competencies of counselors at the elementary, middle or junior high school, and the secondary level.[3] Elementary school counselors are expected 1) to provide inservice training and consultations to teachers and parents that will assist in planning and implementing interventions which maximize the personal development of students, 2) to cooperate with other school staff in the early identification, remediation, or referral of students with handicaps or developmental deficiencies, and 3) to assist students as they reach the upper elementary grades to understand the relationship between educational choices and career development.

Middle or junior high counselors 1) facilitate transition from the lower school to the middle or junior high school, 2) assist and support teachers (through in-service training, consultation, and co-teaching) to incorporate developmental units in the curriculum, and 3) implement career guidance programs for students. Secondary counselors 1) organize and implement guidance curricula interventions that focus upon developmental concerns of adolescents; 2) provide information necessary for educational and vocational planning; 3) assist students with assessment of personal characteristics to facilitate course selection, post-high school planning, and career choices; and 4) provide remedial interventions or alternative programs for those students showing in-school adjustment problems, vocational immaturity, or general negative attitudes toward personal growth.[3]

Assurances of the achievement of these basic role competencies is usually a function of certification standards issued at the state level.

- 50 states (98%) provided certification for guidance counselors.
- 49 states (96%) mandated certification as a condition of employment.

Approximately one-half the states provided opportunities for counselors to specialize at various grade levels (Table 6.2).

- 25 states (49%) made specific certification for elementary school guidance counselors available.
- 9 states (18%) made specific certification for middle school guidance counselors available.
- 24 states (47%) made specific certification for secondary school guidance counselors available.

Counselor education and training standards have been developed by two groups affiliated with the American Association for Counseling and Development, the national, professional organization for counselors. The Council for Accreditation of Counseling and Related Educational Programs establishes standards for counselor education programs. The Association of Counselor Educators and Supervisors establishes standards for training, education, and supervision of counselors.[4]

- 42 states (82%) required a master's degree to be certified as a guidance counselor. Three (6%) states required a bachelor's degree plus a minimum of 24 graduate hours, while five states (10%) required only a bachelor's degree.
- 36 states (71%) required both a supervised internship and teacher certification to qualify as a counselor.
- 25 states (50%) required that guidance and counseling personnel attend inservice programming and 13 states (26%) mandated that guidance and counseling personnel receive continuing education credits.

The demand for certification, minimum education requirements, and continuing education must be tempered with the realization that 10 states (20%) allowed school systems to employ a non-certified individual to function as a guidance counselor (guidance counselor aide).

Table 6.2
States in Which Separate Certification is Available

States	Grade Level		
	Elementary	Middle School	Secondary
Alaska	✓	✓	✓
Arkansas	✓		✓
Colorado	✓	✓	✓
Delaware	✓		✓
Hawaii	✓		✓
Idaho	✓		✓
Indiana	✓		✓
Iowa	✓		✓
Kansas	✓	✓	✓
Kentucky	✓		✓
Louisiana	✓		✓
Maine	✓		✓
Minnesota	✓	✓	✓
Missouri	✓		✓
Nebraska	✓		✓
Nevada	✓		
North Dakota	✓		✓
Oklahoma	✓	✓	✓
Pennsylvania	✓		✓
South Carolina	✓	✓	✓
Tennessee	✓		✓
Utah	✓	✓	✓
Virginia	✓	✓	✓
West Virginia	✓	✓	✓
Wisconsin	✓		✓

Programming

Programming, either mandated or recommended, varied considerably. Table 6.1 outlines the specific programming recommended or required by law by the various states. Table 6.3 delineates the number of states requiring or recommending specific programming activities. A review of the functions of the elementary, middle school, or secondary counselor as proposed by the American School Counselor Association[5] reveals many of the prescribed functions were not mandated by most states.

Table 6.3
Number and Percentage of States that Required Specific Activities by Counselors.[1]

Activities	Level of Policy	
	Mandated by Law N (%)	Recommended N (%)
Train teachers to promote student interpersonal development	3 (6)	28 (55)
Train teachers to build healthy classroom environments	**3 (6)**	**29 (57)**
Assist parents in understanding child growth and development, communication, and learning skills	8 (16)	30 (59)
Identify, refer, or remediate children with developmental deficiencies or in-school adjustment problems	**18 (35)**	**25 (49)**
Provide career planning vocational guidance activities	19 (37)	27 (53)
Facilitate students' transition to middle and secondary schools	**9 (18)**	**29 (57)**

[1]Items not totaling 100% are due to missing data.

Career Planning

Career planning, the initial focus for all guidance programming was the activity most states mandated.

- 19 states (37%) mandated career planning for students; 27 states (53%) recommended this activity.

Remediation of Children with Problems

Although the school counselor program originally was implemented to provide vocational guidance, the program has evolved to provide several additional programs such as the identification and management of students with school adjustment, interpersonal problems, or developmental deficiencies.

- 18 states (35%) required identification, referral, and remediation of children with developmental deficiencies or adjustment problems; 25 states (49%) recommended such activity.
- 12 states (24%) required programs in areas such as human relations, interpersonal development, and goal setting; while 29 states (57%) recommended this activity.

Table 6.1 State Requirements Regulating Guidance and Counseling

● = Indicates that the item is mandated or required.
✕ = Indicates that the item is recommended.

	Alabama	Alaska	Arizona	Arkansas	California	Colorado	Connecticut	Delaware	D.C.	Florida	Georgia	Hawaii	Idaho	Illinois	Indiana	Iowa	Kansas	Kentucky	Louisiana	Maine	Maryland	Massachusetts
Legal Basis for Program	✕			●	✕				✕	●	●	✕			●	●	●	●		●	●	
Certification Available: Elementary		✕		✕		✕		✕				✕	✕		✕	✕	✕	✕	✕	✕		
Middle School		✕				✕											✕					
Secondary		✕		✕		✕		✕				✕	✕		✕	✕	✕	✕	✕	✕		
Professional Activities Teacher Inservice/ Interpersonal Development	✕	✕	✕	✕			✕	✕			✕	✕	✕	✕		✕	✕	✕	✕	✕	✕	✕
Teacher Training/ Building Healthy Classrooms	✕	✕	✕	✕	✕		✕	●			✕	✕	✕	✕		✕	✕	✕	✕	✕	✕	✕
Parental Assistance/ Development, Communication	✕	✕	✕	✕	✕		✕	●		●	●	✕	✕	✕	✕	✕	✕	●	✕	✕	✕	✕
Identification/Referral Students in Need	✕	✕	●	✕			✕	●	●	●	●	✕	✕	●	✕	✕	●	●	●	✕	✕	✕
Career Planning	✕	●	●	●	✕		✕	✕	●	●	●	✕	✕	●	✕	●	✕	●	✕	●	●	✕
Transition/Facilitation	✕	✕	●	●	✕		✕	✕	●		●	✕	✕	✕		●	✕	●	✕	✕		✕
Student Programming Drug Abuse	✕	✕	●	✕	✕		✕	●	●		●	✕	✕	●		✕	✕	✕	●	✕	✕	✕
Sexual Activity	✕	✕	✕				✕	✕	●		●	✕	✕	●		✕	●	✕	✕	✕	✕	✕
Suicide	✕	✕	✕	✕	✕		✕	✕	✕	●	✕	✕	✕			✕	✕	✕	✕	✕	✕	✕
Stress & Violence	✕	✕	✕	✕	✕		✕	✕	✕		✕	✕	✕			✕	✕	✕	✕	✕	✕	✕
Nutritional Disorders		✕	✕	✕			✕	✕	✕		●	✕	✕			✕	✕	✕	✕	✕	✕	
AIDS/HIV	✕	✕	✕	✕			●	✕	●		●	✕	✕	●		✕	●	✕	✕	✕	●	✕

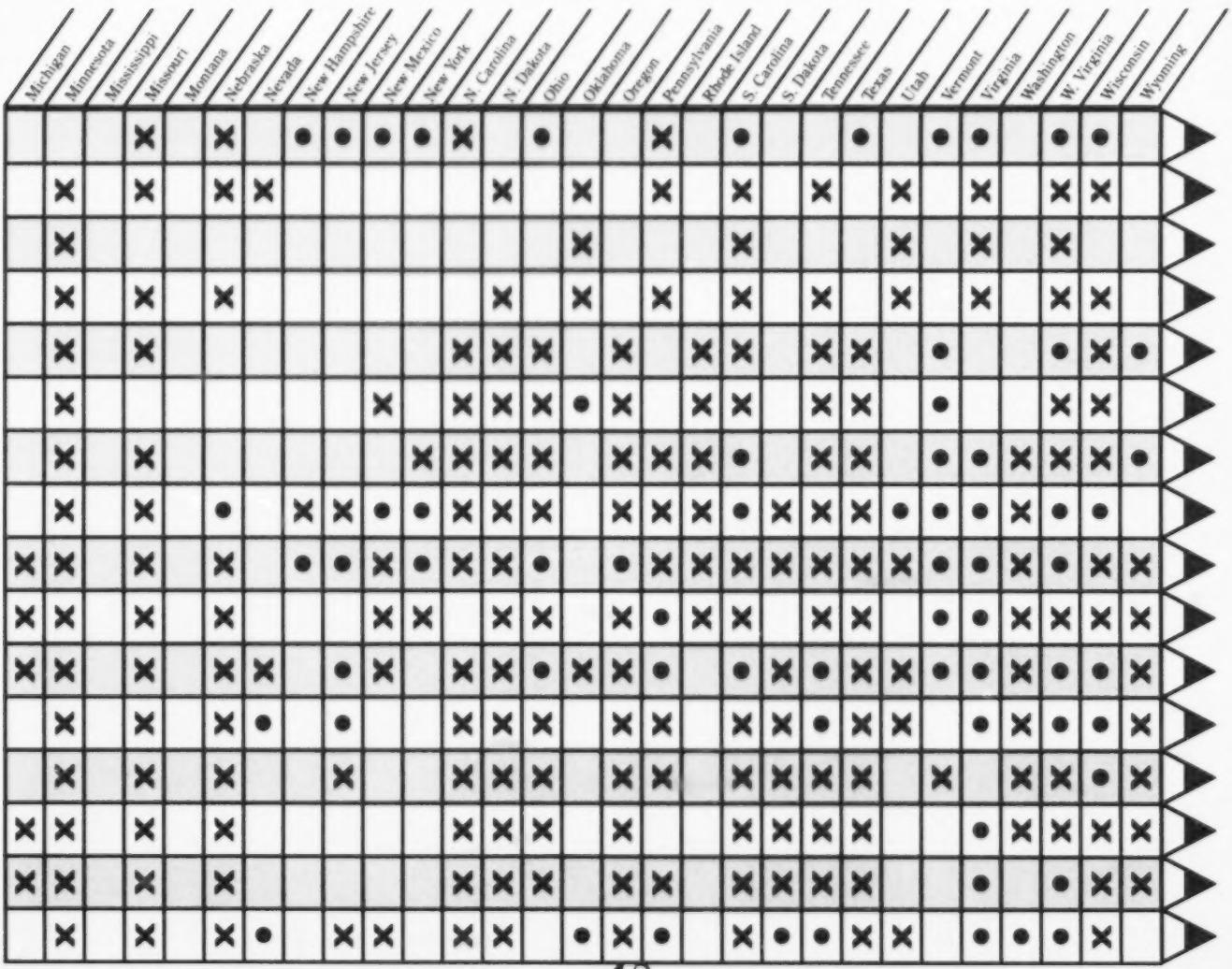
Health Promotion Programming

Medical scientists have recognized that the sources of many health problems lie in patterns of behavior. Klingman[3] suggested that school counselors are particularly well-suited to apply the knowledge of behavioral medicine in the primary prevention of health-related problems. A substantial increase in prevention research in the professional literature of counselors is evident.[6] The counselor can provide broad-based intervention programs to promote the physical, emotional, and social health of students. Interventions used by the counselor include life skills training, peer led discussions, peer counseling, assertiveness training, problem solving training, as well as programs to address self esteem, peer pressure and adolescent rebellion.[3]

More than one-half the states recommended programming in these areas. While several states mandated programs that addressed drugs, sex, AIDS, suicide, stress and violence, and programs dealing with nutritional disorders, many states recommended these practices (Table 6.1).

- 15 states (30%) mandated programming on drug abuse prevention; 28 states (55%) recommended this programming.
- 14 states (28%) mandated programming regarding AIDS/HIV prevention; 24 states (47%) recommended this programming.
- 10 states (20%) mandated programming regarding sexual activity; 27 states (53%) recommended this programming.
- 3 states (6%) mandated programming regarding issues dealing with nutritional disorders; 29 states (57%) recommended this programming.
- 2 states (4%) mandated programming regarding suicide; 35 states (69%) recommended this programming.
- 1 state (2%) mandated programming regarding stress and violence; 34 states (67%) recommended this programming.

Since this survey was conducted, the Center for Disease Control has recommended and funded AIDS instructional programs for students. The National Association of State Boards of Education reported that as of May 1989, 29 states had mandated AIDS education.[7]



In-Service Training of Teachers and Parents

The American School Counselor Association suggests the guidance and counseling function is maximized when in-service programs detailing how developmental psychology may be incorporated into the curriculum are provided for the teaching staff. Further, providing parents with an understanding of child and adolescent development strengthens the role of the parents in the promotion of growth in their children.[5]

- 3 states (6%) required in-service training for teachers to assist in implementing developmental guidance experiences that promote interpersonal development of students; 28 states (55%) recommended this practice.
- 3 states (6%) required training to teachers to assist them in building a healthy classroom environment; 29 states (57%) recommended this activity.
- 8 states (16%) required providing assistance to parents to aid them in understanding child growth and development, communication, and learning skills; 30 states (59%) recommended this practice.

Counselor to Student Ratio

The responsibilities of the counselor include individual counseling, group procedures, testing, placement and follow-up, services to the instructional staff, and services to the administration. Successful programming is dependent upon having sufficient credentialed individuals providing the various required services.

- 14 states mandated a counselor to student ratio, ranging from 1:340 to 1:500 counselors to students (Table 6.4).

Table 6.4
States that Required a Specific Counselor to Student Ratio

States	Ratio
Arizona	1 to 500
Georgia	1 to 340
Idaho	1 to 400
Indiana	1 to 450
Kentucky	1 to 500
Louisiana	1 to 450*
Montana	1 to 400
Nebraska	1 to 450
New Hampshire	1 to 400
South Carolina	1 to 500
South Dakota	1 to 450
Tennessee	1 to 500
Vermont	1 to 350
Virginia	1 to 425

*Secondary school only

Summary

Although most states designated an individual within the state office of education with directing and supervising the guidance and counseling program in the state's public schools, only slightly more than one-half had educational codes or legislation that established a legal basis for guidance and counseling programs. All but one state provided certification for guidance counselors but only 14 states mandated a student-to-counselor ratio. The most frequently required guidance activities included career planning; identification, referral, and remediation of students with developmental deficiencies or adjustment problems; and programs dealing with drug abuse prevention.

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SCHOOL PSYCHOLOGY

"School psychologists are in a unique position, by the nature of their work with school-aged children to advocate for the primary prevention of many of the health disorders that have as their cause, specific behaviors learned during the developmental years."[1]

The role of the school psychologist has evolved substantially this century . Initially, the psychologist primarily concentrated upon testing, placement and clinical services. With the enactment of Education for All Handicapped Children Act of 1975 (PL 94-142) a large portion of the school psychologist's time was shifted to special education screening and assessment. Traditionally, school psychologists have served the elementary student. Data published during 1974-1977 revealed that 81% of school psychology journals *(e.g. School Psychology Digest, Journal of School Psychology,* and *Psychology in the Schools)* published articles related to elementary student, only 7% of the articles focused on secondary students. More recently, the school psychologist's role has expanded to include other areas of consultation and programming related to the mental and physical health of secondary, as well as elementary school children.[2]

Responsibilities of the school psychologist vary within states as much as between states. However, most psychologists are intricately involved with psychoeducational evaluation and education programming for children and youth with perceived behavioral, emotional or learning problems. The primary goal is to ascertain the factors hindering optimal school performance for the referred student and to assist the school system in providing an educational plan to ameliorate/eliminate the problem.[3] "Though school psychologists in general have focused on health compromising behaviors only to the extent that these behaviors overlap with norm-violating or psychopathological behavior..., the school psychologist, as the behavioral scientist within the school system, can assist development of programming to promote health enhancing behaviors."[3]

State Organization

Thirty states (59%) had an educational code or other legislation that mandated school psychological services (Table 7.1). State boards of education addressed school psychology in 8 states (16%) in the form of resolutions, by-laws, policy statements, and position papers. Other formal actions included certification standards, administrative guidelines and regulations.

Thirty-one states (61%) required a state administrative office to direct/supervise school psychology programs. Departments of instruction were responsible for school psychology programming in 41 states (80%).

State Coordination

The quality and effectiveness of school psychology programming can be enhanced through the provision of specific funding, a guide or manual detailing programming, systematic evaluation, and the coordination of psychological services with other departments at the state level responsible for school health.

- 12 states (24%) allocated funds for school psychology programs other than the salary for personnel. The median

funding level reported by these states was $20,000 with a range between $1,000 and $400,000.
- 4 states (8%) conducted an evaluation of their school psychology program.
- 13 states (26%) had a manual or guide which provided assistance in the development of local programs. The year of publication of the manuals ranged from 1975 to 1988. Six states stated that the manual was currently being revised.

Some school psychology representatives met at least once a year with a representative of other state programs to coordinate programming.
- 26 states (51%) met with a school health services representative.
- 25 states (49%) met with a guidance and counseling representative.
- 19 states (37%) met with a health education representative.
- 13 states (25%) met with a physical education representative
- 7 states (14%) met with a health environment representative.
- 5 states (10%) met with a food services representative.

Personnel

A professional school psychologist is defined by the American Psychological Association (APA) as an individual who has a doctoral degree from a regionally accredited university or professional school providing an organized, sequential school psychology program.[4] Further, other personnel who offer school psychological services may use the adjective *psychological* in their title but are not recognized by school psychologists. For example, a *specialist in school psychology* is an individual who has completed a minimum of two years of graduate study and a training program that includes a minimum of 1,000 hours of supervised experience by a professional school psychologist.[4] In contrast, the National Association of School Psychologists (NASP) has designated the specialist degree as entry level.[3]

To guarantee students receive high quality services, most state educational agencies have established certification requirements. Licensure is usually the responsibility of a state board of psychological examiners. Requirements for certification or licensure are adopted individually by each state department of instruction. According to the APA guidelines, providers within a school psychological services unit must conform to relevant state statutes.[4] Table 7.1 specifies those states that have certification and licensure requirements for school psychologists.
- 46 states (90%) required certification for school psychologists.
- 16 states (31%) required licensure for school psychologists.

Approximately three-fourths of all school psychologists hold non-doctoral degrees but are credentialed through certification and licensing.[5]
- 46 states (90%) required a master's degree as the minimum educational degree necessary to receive certification.
- 43 states (84%) required a supervised internship for certification as a psychologist.
- 30 states (59%) required continuing education units to maintain certification.
- 2 states (4%) required a doctor of philosophy degree as the minimum educational degree to receive certification.

Utilization of Other Providers of School Psychological Services

The National Association of School Psychologists and the American Psychological Association have articulated standards for professionals who provide school-psychological services. A previous survey of states[6] indicated many states do not enforce these practice standards. Although participation in school-psychological services by personnel other than school psychologists at times may be appropriate, some individuals may not be prepared for the task.[6] The number of states and personnel categories who reportedly provided such services are shown in Table 7.2.
- 27 states (53%) reported using personnel other than certified school psychologists as providers of school psychological services in the schools.

Table 7.2
Number and Percentage of States Reporting Personnel Other than School Psychologists as Providers of School Psychological Services

Personnel Categories	N (%)
Clinical Psychologist	21 (41)
Educational Psychologist	16 (31)
Consulting Psychologist	16 (31)
Psychological Examiner	14 (27)
Psychometrician	12 (24)
Counselor	12 (24)
Psychiatrist	9 (18)
Special Education/Resource Teacher	7 (14)
Diagnostic/Prescriptive Teacher	7 (14)
Psychological Assistant	4 (8)
Principal	2 (4)
Classroom Teacher	2 (4)

Programming

School Psychologist's Role

According to the APA, school psychological services refer to services offered in educational settings, from preschool through higher education, that protect and promote mental health and facilitate learning. Services include 1) psychological and psychoeducational evaluation and assessment of the school functioning of students; 2) interventions to facilitate the functioning of individuals and groups; 3) interventions to facilitate the educational services and child care functions of school personnel, parents, and community agencies; 4) consultations and collaboration with school personnel and/or parents concerning specific school related problems and the professional problems of staff; 5) program development services to schools, administrative systems, and to community agencies; and 6) supervision of school psychological services.[4]
- 28 states (55%) had adopted guidelines that describe the role and function of a school psychologist.

Table 7.1 lists those states that used guidelines. While the National Association for School Psychologists, and the American Psychological Association have developed such guidelines, most states have developed their own guidelines.
- 21 states (41%) used state-developed guidelines.
- 4 states (8%) used NASP guidelines.
- 2 states (4%) combined NASP guidelines with state developed guidelines.
- 1 state (2%) combined NASP guidelines with the APA guidelines.

School Psychologist to Student Ratio

A school psychological service unit's work load requires sufficient professional school psychologists or specialists in school psychology to meet the goals and objectives of the unit. The APA guidelines for the ratio of school psychologists/specialists in school psychology to students is 1:2000.[4] Table 3 lists states that reported a ratio.

- 16 states (31%) had a state recommended school psychologist-to-student ratio. The recommended ratio ranged from 1 psychologist per 1,000 students to one per 2,500 students, with an average ratio of 1 psychologist per 1,653 students reported. Only three states reported the ratio was mandated by law.

Table 7.3
States that Required a Specific School Psychologist-to-Student Ratio

States	Ratio
Alabama	1 to 2,000
Alaska	1 to 1,000
California	1 to 2,000
Colorado	1 to 2,000
Connecticut	1 to 1,000
District Of Columbia	1 to 3,000*
Idaho	1 to 2,000*
Illinois	1 to 1,000
Kansas	1 to 1,500
Kentucky	1 to 1,500
Montana	1 to 1,500
North Carolina	1 to 2,000
North Dakota	1 to 2,000
Ohio	1 to 2,500
Rhode Island	1 to 1,500*
South Carolina	1 to 1,200
Tennessee	1 to 1,750
West Virginia	1 to 2,500
Wisconsin	1 to 1,000

*Mandated by law

Table 7.1 State Requirements Regulating School Psychological Services

● = Indicates that the item is mandated or required.
✖ = Indicates that the item is recommended.

	Alabama	Alaska	Arizona	Arkansas	California	Colorado	Connecticut	Delaware	D.C.	Florida	Georgia	Hawaii	Idaho	Illinois	Indiana	Iowa	Kansas	Kentucky	Louisiana	Maine	Maryland	Massachusetts
Legal Basis for Program	●		●		●	●		●	●	●	●	●	●	●	●		●	●	●	●	●	●
Guidelines for Role & Functions	●	●	●				●		●	●	●			●	●	●	●	●	●	●	●	
Professional Requirements Certification	●	●	●		●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●
Licensure	●	●	●		●		●			●								●		●		

Summary

More than one-half of the states have educational codes or other legislation that mandated school psychological services. While most states required certification for those individuals practicing as school psychologists, over half of the states used personnel other than certified school psychologists as providers of school psychological services. A recommended school psychologist-to-student ratio was established by almost one-third of the states. The average ratio was 1 psychologist per 1,653 students.

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